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Borough of Leicester.

ANNUAL REPORT

ON THE

HEALTH OF LEICESTER

DURING THE YEAR

1885,

BY

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ROYAL COL
21 MAY

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Meets weekly, on Friday, at 3.30 p.m.

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Town Hall,
Leicester,
March, 1886.

TO THE CHAIRMAN AND MEMBERS OF THE SANITARY COMMITTEE.

Gentlemen,

I have the pleasure to submit to you my report upon the health of Leicester for the year 1885, and in doing so would ask your indulgence for any shortcomings therein, following as it does after so many excellent reports received by you in former years from Dr. Johnston, my predecessor in office.

As my connection with your Corporation did not commence until something more than the first half of the year had passed away, the statistical part of this report is necessarily based upon figures and returns partly supplied by my predecessor.

I had proposed to myself to endeavour at the close of the year to take a retrospective view of the sanitary progress made in Leicester, and the results thereof during the preceding ten or fifteen years. Bodies corporate, like individuals, do well at times to review the work they have accomplished, both for a comparison of present with past conditions and as an incentive to still further efforts in the future. Unfortunately neither the time, nor the necessary data at present at my disposal, have been sufficient to do this in a manner that would have been satisfactory, and I have therefore reluctantly been compelled to postpone this work to some future occasion, and have contented myself with a general review of the year's work and present condition of the Borough, with comments on such matters as have chiefly arrested my attention in coming as a stranger into your town.

I am, Gentlemen,

Your obedient servant,

HY. TOMKINS.

LONDON SCHOOL OF HYGIENE AND TROPICAL MEDICINE
19 JUL 1947

MEDICAL OFFICER'S REPORT.

1885.

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I.

SANITATION.

Health and Sanitary matters generally.—In presenting to the Sanitary Authority the Annual Report upon the health of Leicester during the year 1885, it is a source of satisfaction to find that, although several adverse factors have been at work during that period, the health of the town generally, as shown by the death rate, has been of a satisfactory character; only once during the past ten years has so low a mortality been registered, that being in 1883, when the death rate was 19·2 as against 19·4 for the year just ended. (See Table II.).

Death rate for year.

Borough Boundaries and Water Supply Schemes.

Many matters of considerable importance from a hygienic point of view have occupied attention during the past twelve months, to which a passing allusion may fitly be made. Schemes for a large extension of the boundaries of the borough and for an increased water supply have been under the consideration of the Council, and having received the approval of a majority of the ratepayers, are at the present time* before the House of Commons for Parliamentary sanction.

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*Since the above was written the Water Bill promoted by Leicester has been rejected by a Committee of the House of Commons; chiefly owing to the opposition to it from the neighbouring town of Loughborough, who appeared to have prior claims to the particular supply sought, and still later the Extension Bill has suffered the same fate.

Proposed mprovement of ewage disposal.

Sewage Farm and Improved Sewers.

A matter of no less importance, and one which has long been a source of anxious concern, is the attempt about to be made to deal with the sewage of the town by means of irrigation, a site having been acquired on the Beaumont Leys estate for the purpose of a sewage farm to be established there; while still more recently the subject of providing a better and more perfect system of sewers has been seriously taken in hand. Constructed many years ago, when the town was scarcely half its present size, they are now far too small for its requirements, added to which many of the older ones are notoriously badly constructed. No more important matter connected with the health of the town can possibly be imagined, and the subject will be referred to again at a further stage of this report.

Meeting of Sanitary Institute.

In September the Sanitary Institute of Great Britain held its annual meeting in Leicester, and amongst the subjects brought forward for discussion were those of vaccination and infantile diarrhœa, both of special interest to this town; though it is doubtful whether many converts were made to vaccination amongst those opposed to it, or whether any real additional light was thrown upon the obscure problems connected with the prevalance of infantile diarrhœa in this locality.

Re-arrangement of Health Department.

Appointment of Medical Officer of Health, &c.— In the early part of the summer, owing to the resignation of Dr. Johnston, who had been Medical Officer of Health for the past seven years, it was decided to place this appointment on a different basis; the duties of Medical Officer of Health and Analyst were combined, and the officer appointed under these new conditions was required to devote the whole of his time to the duties of his office, and as official head of the Health Department, to be provided with the necessary accommodation within the Town Hall buildings, thus following the example of most other towns of any considerable size; and seeing what the present size and importance of Leicester is, it cannot be said that this step has been taken prematurely.

Provision of Laboratory.

The establishment too of a laboratory in connection with the department is an important step in the right direction, for in addition to carrying out the requirements of the law in respect to the adulteration of food and drugs, it is only by means of a properly and well equipped laboratory that many enquiries and investigations, having a direct bearing upon the spread of disease and other matters intimately connected with the welfare of the health of the community at large, can be satisfactorily pursued.

Prevalence of Infectious Disease.

Infectious Diseases.—During the past year there has come to the knowledge of the Sanitary Authority, by means of the system of compulsory notification, the following cases of infective disease:—8 Small Pox, 1,816 Scarlet Fever, 216 Typhoid Fever, 55 Diphtheria, 294 Erysipelas, and 8 Puerperal Fever.

In considering these figures the fact that stands out most prominently is the marked prevalence of Scarlet Fever. Past records show that this disease has been present in the town in a more or less epidemic form for the last six years, (see table XIII) notwithstanding all endeavours to check and extinguish it. In September and October last, when the numbers reported attained the maximum, increased efforts were made to effect their removal to hospital, and more than 80 per cent. of the cases were thus isolated. The town was placarded with bills asking parents to avail themselves of the benefits of the hospital, and shortly setting forth the penalties to which they were liable for allowing convalescent children to come into the streets and mix with others whilst in an infective condition; for it was undoubtedly shown by the personal inspection of some thousands of children attending school, that many were thus mixing with their fellows whilst the skin was undergoing desquamation. Many of these cases had been of so slight a character that the parents appeared not to have known that the children had had the disease; though on enquiry a history of sore throat, with a day or two's indisposition some two or three weeks back, was usually obtained, and the rough condition of the hands and feet thus fully accounted for.

Scarlet Fever Epidemic.

Efforts to chec do.

Infection in Schools.

Necessity of
further enlight-
enment on part
of public.

Indeed it is to be feared that until the public generally have become more fully alive to the long continued infective period of this disease, and on their part assist the authorities in endeavouring to check the spread of this pest of our juvenile population, it will continue to be a source of much sickness and loss of life. Even persons keeping small shops for the sale of provisions, &c., have in several instances with difficulty been made to see the danger to their customers from children thus suffering often lying in the room adjoining the shop, whilst the mother was waiting one minute on the sick child and the next on a customer; and in some instances it was not until legal proceedings were threatened that the child was allowed to be removed to the hospital or other effective steps taken to prevent further dissemination of the disease. At the end of the year, when the schools broke up for their Christmas holidays, this period of closure was extended, on the recommendation of the Sanitary Committee, to three weeks, and every school building was thoroughly disinfected. Circulars were also addressed to the teachers in the schools asking their aid in endeavouring to discover possibly infectious children amongst the scholars, and since that time the disease has shown a marked diminution.

Schools closed
for prolonged
period.

esult of efforts
o check Scarlet
Fever by isola-
tion.

It is not an unreasonable thing that a health authority, after using all its resources and going to large expense in obtaining information as to the existence of this disease, and maintaining a hospital for the isolation and treatment of the same, should ask itself, *cui bono*, or to what purpose has all our work been ? and a few remarks from a medical journal *apropos* of this subject may not be out of place. The *Lancet*, in reviewing a series of articles published in the *Practitioner*, on the working of the acts relating to the notification of infectious diseases in England, and the results obtained therefrom as shown by the lessened mortality from these special diseases in the districts concerned, after alluding to the indirect good effected by the general education of the public in some of the first principles of health, and that people hitherto most careless in the matter of infection have thus constantly brought before them the importance which is attached to measures calculated to prevent the spread of disease, and in this way gradually acquire a much keener sense of their responsibilities in these matters, admits that the statistical evidence at present forthcoming is disappointing as to the reduction of the prevalance of Scarlet Fever, a disease against which, apart from general improvement of sanitary conditions, no other means of prevention in our present state of knowledge seem available, except such early isolation and disinfection as notification would appear to favour, if not to secure. It is, however, suggested that in many districts the period which has elapsed since notification came into operation has not been long enough for the eradication of a poison which has become deeply rooted in our large centres of population, or to secure such satisfactory hospital accommodation as should have sufficed to remove a somewhat general feeling of opposition to that immediate isolation which alone can avail to prevent the disease from spreading. As regards Leicester, the only feature that one can point to with any sense of satisfaction is the low mortality that has occurred, especially amongst those treated in hospital, a mortality below the usual experience of such hospitals. (See table B of Hospital Report.)

Results of Ho pital treatmen in Leicester.

There can be no question that not only has life been saved by the work of the Borough Hospital, but that much after sickness and suffering has been prevented, for scarlet fever is of all the infectious diseases the one most likely to be followed, at a late period, by serious complications, of which parents are so frequently in utter ignorance.

It is in evidence by the medical men of the town that children have in many instances not been brought to them at all until they were suffering from dropsy or otorrhœa, or glandular abscesses, the undoubted result of a neglected mild attack of Scarlatina.

Prevalence o Measles.

In the first quarter of the year Measles, which had become epidemic at the close of the year 1884, still continued very prevalent, gradually diminishing during April and May, at the end of which month it had nearly disappeared.

Prevalence of Typhoid.

Typhoid Fever shewed an unusual prevalence in the second quarter of the year, and the number of cases again increased during the autumn months, in accordance with the customary increase during that season of the year. The only other point of note in a general review of the prevalence of infectious diseases is the number of deaths occurring from Whooping Cough, a disease which, if properly treated, should in the greater number of cases be recovered from; both this and measles depending far more upon the nurse than the doctor for its successful treatment.

Whooping Cough.

Erysipelas: mostly trivi l cases.

The large number of cases of Erysipelas, although at first sight alarming, is capable of some explanation; for, as the result of inquiry into each separate and individual case, many of these are found to be of a most trivial character, and, as is well known, it is in many cases difficult to draw the line between a simple inflammatory redness and true erysipelas. Somewhat similar remarks will apply to Diphtheria and Typhoid Fever, in both of which, rather than err on the side of withholding information from the health authorities, notice is often received of cases that scarcely deserve the name of such diseases.

Typhoid and Diphtheria.

Steps taken to heck infection.

In every instance where notice has been received of any infectious disorder, the house has at once been visited by the inspectors, and when deemed necessary, by the Medical Officer of Health also. In the case of Small Pox and Scarlet Fever, every effort is used to induce the patient or patients' friends to avail themselves of the hospital. A large proportion of the Typhoid cases were treated in the Infirmary wards. The houses and all infected clothing have been thoroughly disinfected without expense to the occupiers, and the Sanitary Committee are now prepared to disinfect, free of charge to inhabitants of the Borough, any infected materials they may wish to have so treated. No case of Typhus Fever has been met with, and indeed, this plague of many crowded communities is in Leicester apparently unknown at the present day.

isinfection of fected clothing nd buildings, &c.

Small Pox.

During the year Small Pox has made its appearance at four points in the town; three of the cases were found to be undoubted importations, one being from Sheffield and the other two from London. As to the fourth case, nothing definite could be ascertained: the patient had attended the races some fourteen days before he fell ill, and as there were no cases of Small Pox in the town, it is supposed he came in contact with some infected person on the Course. A doubtful case was reported in St. Saviour's district; the man, as a precautionary measure, was removed into quarantine, and the disease not having developed, was discharged at the end of a period of fourteen days. By the prompt and vigilant action of Inspectors Brailey and Buxton, all these cases were at once removed to hospital, and those persons who were known to have possibly been infected by them were removed to the quarantine wards; four of these fell with the disease whilst there, and the others were discharged at the end of the usual period of incubation, no symptoms of Small Pox having developed.

Persons sent int
quarantine.

Sewers of Borough.—For many years past the cleansing of the Sewers has been going on more or less regularly, and in former health reports, this has been referred to by the Medical Officer, where he has shown that in numerous instances these contained large quantities of deposit; and to those persons who have paid any attention to the sewering of the town, it will be well known that in all the lower parts of the district, more or less deposit is constantly going on. It is among the elementary principles of efficient sewerage, that the drains and sewers should be of sufficient size, of sufficient fall; that they shall be free from deposit and properly flushed and ventilated; otherwise their contents soon begin to undergo change and decomposition, evolving the notorious and dreaded sewer gases, the source, not only of nuisance, but of much sickness and disease. In fact, unless some efficient means are provided for the rapid flow along and removal from the sewers of their contents, they become little better than an elongated system of underground cesspools. The sewers of the Borough are at the present time numerously provided with ventilating shafts opening in the middle of the roads, but owing to the condition above alluded to, they

Deposits in
Sewers.

Conditions fo
perfect sewers

Results of de-
posits in sewer

Ventilation o
sewers.

Complaints of offensive smells from sewers.

have in many places given rise to complaints from the offensive odours, &c., which are said to arise from them; and thus the ventilation, while right in principle, and which should provide for the free circulation of air within the sewers, becomes a source of unavoidable nuisance. In a clean and properly arranged sewer, the amount of *sewer gas* should be but small, and *sewer air* should not by any means be synonymous with *sewer gas*. Again, owing to the insufficient size of the present sewers of the town, whenever there is an unusually heavy rainfall, the contents cannot get away fast enough to prevent their overflow; and in many of the lower parts, these back up and find their way into the cellars of the houses, thus polluting the subsoil of the dwellings, though to a much lesser extent than before the cleansing, &c., had been taken in hand, and supplemental sewers provided, for taking off some of the storm water. Under such circumstances, it must be a source of satisfaction to know that the construction of new and more efficient sewers is occupying the attention of the Corporation, and that the Borough Surveyor has at the present time a scheme before the Committee dealing with this matter. No subject affecting more closely the health of the inhabitants can be found, for without pure air, health cannot be looked for; and air contaminated with the emanations from unclean sewers is one of the most fertile sources not only of Fever, as is popularly supposed, but also of various other forms of sickness and ill health.

Insufficient size of drains.

Proposals to improve sewering of town.

Pail Closets.—In a large part of the town, especially the older parts, the "pail system" of closets has been in operation for some years. The removal and collection of the receptacles, without causing a nuisance, is almost impossible under the old methods, and rendered it necessary for this work to be done at night; but an experiment has recently been commenced of using a new and improved pail with an air-tight lid, such as is used at Rochdale and some other towns, which, if it prove satisfactory in working, will tend to minimize the nuisance of their collection, and will probably enable some of this work to be done in the daytime, which of itself would be an important factor in getting this unpleasant but

Improved method of removal.

necessary work conducted in the most cleanly and expeditious manner.

Nuisance arising therefrom unavoidable.

Slaughter Houses.—In all towns unprovided with public abattoirs, private slaughter houses are an absolute necessity; they are none the less, however, and must necessarily be, a source of nuisance. The watchword of every health authority should be "Cleanliness," and all who have any practical acquaintance with the work carried on in a slaughter house know that cleanliness, from a sanitary point of view, cannot be satisfactorily enforced; with the utmost care, more or less contamination of the soil and surroundings must take place, contamination too of a most objectionable character, such as the constant presence of a greater or less quantity of excreta and other refuse from the carcases of the animals slaughtered.

Inspection of animals as to health less eas in private slaughtering-houses.

Suggestions fo their gradual abolition.

If this must be so where the greatest care is exercised, it is easy to see how little neglect will quickly intensify all these unfavourable conditions. Careful inspection of any slaughter house and its surroundings, and enquiry from the adjoining neighbours, will serve to demonstrate the truth of these statements. Further, and of equal importance, is the fact that the same supervision as to the condition of the animal about to be slaughtered, and taken as meat to the market, cannot be carried out in private as in public slaughter houses; and there is every reason to believe that many diseased animals are thus got rid of and sold for human food, which would have been condemned had they been seen by the proper official during life. Such being the case, it is worthy of the consideration of the Sanitary Committee, seeing that Leicester is well provided with public slaughter house accommodation, whether the time has not arrived when some steps should be taken for the gradual abolition of these places from amongst the homes of the people.

The number of private slaughter houses in the town is at present seventy-one.

Milk Shops.—All places used for the retail selling of milk are now under the supervision of the inspector appointed for that purpose, and no such places are licensed until the premises have

Importance of supervision of milk shops.

been declared fit and proper for the keeping of this important article of food. Remembering how easily the contamination of milk is effected, and that it may thus become the means whereby sickness is spread abroad, the importance of the proper supervision of these shops is self evident.

The number of such licensed premises in Leicester is one hundred and seventy-six.

Health of milking cows of great importance.

Cow Sheds.—Of scarcely less importance is the supervision of Cow Sheds, where milking cows are kept and fed, for it is not a desirable thing to have these animals kept, as too many of them are, in small and confined places. To say nothing of the nuisance which may arise from the keeping of animals in such situations, the effect upon the beasts themselves is a thing to be considered. Cows are exceedingly prone to tuberculosis, and it is in the highest degree probable that milk from a tuberculous cow may be the means of transmitting the same disease to man. The health of the cow therefore comes to have an important bearing upon our own health, and they like human beings, are much more prone to develope tuberculous disease when kept in close and confined stalls for lengthened and unbroken periods of time. Unfortunately for us, animals suffering from this disease are not unfrequently good milkers.

There are within the Borough at the present time one hundred and thirteen licensed Cow-keepers.

Bakehouses.—The number of Bakehouses in the Borough is 117, and it is creditable to the town that only a small number of these are situated in cellars or below the level of the ground They have been regularly visited by the inspectors, and the cleansing and lime washing of the walls periodically enforced.

Keeping of Animals in improper places.—The keeping of cows in the town, which exists to so large an extent, however undesirable, is probably unavoidable; but the keeping of swine and other animals in improper places is a practice most reprehensible. In the more crowded parts of the town, the density of population, that is of *human* beings alone, is already much greater than the sanitarian could wish; but when to this overcrowded condition is added large numbers of animals, this evil is intensified and increased, and the keeping of swine in confined localities, and also of ducks and pigeons and other animals in close proximity to, and at times even within dwelling houses, must tend by the excreta and other filth inseparable from these animals, to defile and pollute an atmosphere already not too pure.

Pig keeping important factor in defiling soil and atmosphere.

Common Lodging Houses.—These necessary adjuncts to all large cities are probably not worse here than places of a similar character in other towns, though that may not perhaps be saying much; with one or two notable exceptions, they are anything but what could be desired. The houses used are in many instances badly lighted and ill adapted for their purpose, whilst their internal arrangements generally are not such as tend to morality, and at times scarcely to decency. The subject is one of considerable difficulty to deal with. The supporters and patrons of these places are many of them of the very lowest class of society, and it is hardly to be expected that persons of much refinement or sensibility will undertake their management; still it is within the province of a Sanitary Authority to take steps to secure houses of a more suitable character, and some action of the sort would render unnecessary the continuance of the present unsatisfactory places. A strict supervision has been kept over these houses, and visits have periodically been made both by day and by night, and the cleansing and whitewashing of the rooms enforced. (See Inspector's Report, page 21).

Present lodging houses not satisfactory.

Housing of the Working Classes.—During the year 1885, this subject occupied for a time a considerable amount of public attention, especially during the tenure of office of Lord Salisbury's Government, and certain changes and amendments were made by the legislature in the law relating thereto. Considering the size of Leicester, it is satisfactory to be able to say that the town is without cellar dwellings of any kind, but much of the smaller property inhabited by the poorer classes is not

Absence of cella dwellings in Leicester.

Condition of cottage property.

such as can be viewed with any degree of satisfaction. A large number of these dwellings, more especially those situated in the older courts, are entirely without efficient means of through ventilation; that is to say, they possess no windows, doors or other openings at the back of the dwellings. Most of these also consist of only two rooms, one up and one down stairs, and are incapable of providing for the proper lodgment of children living with their parents. In a smaller number of instances, tenements consisting of one room only, serving for living room, bed room, and all other purposes, are in existence. The rents paid for these wretched homes are, for the accommodation provided, much higher than those of better class property, and it is too often owing to the fact of investments having been made, and yielding a high rate of interest, that so much difficulty is met with when any attempt is made to bring about a change in this class of property. Thus, to give examples, in one court houses consisting of two rooms, only 8 ft. × 7 ft. 6 in. x 7 ft., are let at a rental of 2/6 and 2/9 per week; and as another example, houses with two rooms, 9 ft. 7 in. × 9 ft. 9 in. × 6 ft. 7 in., are let at a weekly rental of 3/-; whilst the one-roomed tenements alluded to, yield a weekly rental of 2/4 unfurnished, and 3/6 and 4/- per week furnished!! Few of the houses in these courts are provided with separate closet accommodation, one or two closets serving for the use of several families; and this necessarily tends to anything but the keeping of them in a clean and satisfactory condition, owing to the absence of individual responsibility, and the freedom of access to strangers and others not belonging to the houses.

Worst property highly rented.

owers possessed n dealing with this property.

When one attempts to suggest a remedy for this state of things, difficulties are met with on every side. Gross overcrowding can be dealt with, and property so dilapidated, or out of repair, as to be injurious to health, can be promptly closed, but a remedy for the above unsatisfactory condition of things, is not so easily found. The chief piece of sanitary legislation, during the year under review, has been in relation to this matter, and although more particularly affecting the Metropolis, applies also throughout the kingdom. The housing of the working class, Act, 1885,

Legislation on the subject.

was one of the few pieces of work done during the short tenure of office of the Conservative Government; but the discussions and enquiry accompanying the passing of this act, served to shew very clearly that it was not so much from the want of power, as from the want of action and putting in force the powers already possessed by Sanitary Authorities, that much of the deplorable state of the dwellings of the poor was due. The chief provisions of this last piece of legislation is that it attempts to give more life and vitality to Lord Shaftesbury's "Labouring Classes' Lodging Houses," and other such Acts. "The Artisans and Labourers' Dwellings Improvement Act" is made to apply to all Urban Sanitary Authorities, and sec. 7 expressly declares that it shall no longer be permissive, but "shall be the duty of every local Authority entrusted with the execution of the laws relating to the public health, to put such laws in force so as to secure the proper sanitary condition of all premises within the area under the control of such Authority." Sec. 11 has an important provision, whereby "any corporate body holding land may sell, lease, or exchange such land for the erection of dwellings for the working classes, at such price or consideration, or rental as, having regard to the said purpose, is the best that can reasonably be obtained, notwithstanding that a higher price might be obtained if sold for other purposes."

Provisions of New Act, 1885.

Parks and Open Spaces.—In the matter of Parks and Recreation Grounds, Leicester is not badly provided, as the following figures shew:—

Abbey Park, 66 acres; St. Margaret's Recreation Ground, 10 acres; Welford Road Recreation Ground, 9 acres; Spinney Hill Park, 36 acres; Victoria Park, 69 acres.

These lie on the outskirts of the town, on various sides, but, as in other large centres of population, the more densely crowded localities, such as that lying between Wharf Street and Belgrave Gate, and in the Parishes of St. Nicholas and of All Saints, are sadly in need of open places of moderate extent, which could be utilized as playgrounds for the children, and which would play an important sanitary part, by acting as lungs to a great town. In many towns, notably London and Manchester, steps have the past few years been taken with more or less success for the provision of such spaces and playgrounds close to and amongst the homes of the poor, by utilizing old church yards and other similar sites.

Necessity of constant regular inspection.

Systematic House to House Inspection.—In addition to the ordinary inspections and visits to investigate nuisances and complaints, and which must of course receive prompt attention, it is highly desirable that a constant and regular systematic inspection of a town should be kept up, in order that the sanitary condition of every street, court and property should come periodically under review. This is of necessity a slow work, and never-ending, for as soon as completed, it will be time to commence again, in order that whatever change or alterations may have occurred in the interval shall become known, and a strict supervision kept up, lest anything calculated to create a nuisance or other undesirable condition should in the meantime have arisen.

Unfortunately, this systematic inspection has not, during 1885, progressed in such manner as could have been desired. This has arisen from various causes. Owing to the continued prevalence of Scarlet Fever, a large proportion of the time of the Inspectors has been taken up in connection with this disease, and during some weeks at the latter part of the year, two of the Inspectors were laid aside by ill health. In the case of Sergeant Buxton, owing to continued bodily incapacity for the work of the department, he has at the end of a long term of service been superannuated, and Sub-Inspector Bishop, after careful selection from a large body of candidates, appointed in his place. That the Sanitary Work of the Borough has, however, been vigorously carried on, is evidenced by the accompanying statement of the details of such work supplied by Mr. Allen, the Chief Inspector.

INSPECTOR'S REPORT ON THE WORK CARRIED ON IN THE HEALTH DEPARTMENT DURING 1885.

During the year, 9,099 houses have been inspected, against 7,715 in 1884, the total number of houses inspected to the end of this year being 16,814. Statement **A** gives details of the work during the past year.

In carrying on the inspection, a very large number of sanitary defects have been discovered, and the orders made by the Sanitary Authority have been numerous in consequence. Statement **B** shews the character of the works carried out in each Ward, under formal and informal orders.

In many cases, nuisances have been dealt with, and suggested improvements in Sanitary arrangements have been carried out under informal notices, at least one fourth of the total number of orders being executed without the service of legal notices.

F. W. ALLEN,

Chief Inspector.

STATEMENT A.

Shewing the work done by the Sanitary Inspectors during the year 1885, and also in 1884.

	1885 Visits.	1884 Visits.
House to House Inspection	9,099	7,715
Special Inspections and Investigations of Complaints	8,666	2,775
Re-inspections to ascertain the progress of Sanitary and Informal Orders	8,577	4,771
Contagious Diseases	7,293	1,613
Slaughter Houses	356	231
Common Lodging Houses	520	218
Bakehouses	654	388
Canal Boats	128	
Total No. of Inspections	35,293	17,711
No. of Stacks reported for Smoke Nuisance	13	6
,, Houses Disinfected by the Sanitary Staff	1,428	606
,, Notices sent to Schools in connection with Infectious Diseases	2,180	699
* ,, Houses at which Smoke Test applied to Drains	147	
,, Swine reported to the Medical Officer	167	608
,, Dilapidated Houses	9	46
,, Filthy Houses	125	385
,, Prosecutions	2	

* Out of the 147 houses in which the "Smoke Test" Apparatus was applied to the Drains connecting these houses with the Sewers, no less than 138 were found defective, and permitted the air from the Sewers to pass into the house or premises.

STATEMENT B.

Shewing work carried out under Formal and Informal Orders, during the year 1885.

	Nos.
To abolish Manure Pits and Ashpits	22
,, repair do. do.	383
,, erect new do. do.	13
,, provide Ashtubs or Bins...................	36
,, abolish Privies	13
,, ,, Privy Cesspools or Vaults	5
,, ,, Pail Closets.......................	2
,, erect new Water Closets	35
,, ,, ,, Pail Closets	9
,, repair, alter, or rebuild Closets	254
,, fix Closet Hoppers and Syphons	50
,, fix Flushing Apparatus and lay on Water Supply	77
,, repair do. and do.	64
,, alter and ventilate Soil Pipes................	153
,, fix ventilated Syphons.....................	166
,, lay new Drains	86
,, relay or repair defective Drains	581
,, clear choked Drains.......................	218
,, abolish Cisterns and fill up and cover Wells ..	11
,, cleanse or repair Cisterns	96
,, fix lead or iron Sink Wastes	1183
,, fix Traps or Gully Gratings	1044
,, reset Gullies or provide new Gratings	202
,, erect, alter, screen, or repair Urinals	179
,, alter Bath Wastes	35
,, repair, re-hang, or provide new doors for Closets and Dwellings......................	163
,, repair, renew, and make good Spouting	149
,, cleanse and limewash Closets and Passages ..	911
,, pave Yards and Passages, or repair paving....	809
,, provide new, or relay and repair Floors	143
,, repair Roofs	222
,, repair dilapidated Houses	28
,, cleanse and limewash Houses	1182
,, cut off, take up, and stop old Drains	79
,, remove Manure and offensive matter	4
,, remove Animals kept in such a condition as to be a nuisance	128
,, close Wells and lay on Waterworks' supply to house	49
,, alter Chimneys and miscellaneous...........	392
Totals............	9176

MEAT AND FOOD INSPECTION.

Meat and other food condemned

Meat and other Food Condemned.—A considerable amount of Meat, Fish, Fruit, &c., has been condemned by Mr. Wand, the Inspector, and a knowledge on the part of those who might be tempted to dispose of food unfit for human consumption that a vigilant watch has been kept up for the detection of such practices, doubtless tends to prevent much more being exposed for sale. The following is the quantity and kind which has been condemned during the past year.

	tons.	cwt.	qrs.	lbs.
Meat	5	15	1	2
Fish	11	8	0	0
One bag of Mussels.				
Rabbits and Hares			86	
Birds			10 brace.	
Fowls			15	
And a large quantity of Fruit and Vegetables.				

Prosecutions for unwholesome meat

There were two convictions during the year, as the result of prosecutions before the Magistrates; a butcher in Upper Kent Street was fined £3, or one month's imprisonment, for exposing unwholesome meat in the market, and a butcher in High Street was fined £25, or three month's imprisonment, for depositing in a store unwholesome meat prepared for human food.

ANALYSIS OF FOOD, &c.

The following articles of food have been subjected to analysis by the Public Analyst, all of which were declared to be free from adulteration.

41	samples	of	Milk.
16	,,	,,	Bread.
10	,,	,,	Butter.
8	,,	,,	Coffee.
8	,,	,,	Flour.
4	,,	,,	Lard.

WELL WATERS.

Thirty-one samples of well water have been analysed during the year, of which twenty-two were condemned as unfit for drinking purposes, and the wells closed by order of the Sanitary Authority. In 1884 there were 75 specimens examined, of which 53 were condemned.

It is to be hoped, seeing that Leicester is well supplied with wholesome water, that these surface wells, always a source of danger in a crowded community, will ultimately all be closed, and a supply from the town mains be at the service of every inhabitant of the Borough. It is estimated that at the present time there are still 469 wells, from which 978 houses obtain their water supply.

II.

FEVER HOSPITAL.

Necessity of fever hospital

Of all the means at the disposal of a Sanitary Authority for preventing the spread of infectious disease, none is of more importance than that afforded by a properly and well equipped hospital for the isolation of patients suffering from these diseases, and indeed, wherever a system of notification of infectious disease is in operation, such a hospital is a necessary corollary, if much good is to come of the information thus obtained.

Present buildings not in acco dance with modern requir ments.

Hospital Accommodation in Leicester.—Leicester has for some years been provided with a hospital, such as it is, for this purpose, but unfortunately it belongs to that class of structures which until the last few years, has too often obtained in other towns. Intended at first as a more or less temporary building, constructed hurriedly and on an ill designed plan, it may not inappropriately be termed an ugly makeshift. Having, however, been partly covered externally with corrugated iron, it has withstood the wear and tear of 12 or 13 years' use better than many others constructed entirely of wood. Erected originally to meet an outbreak of Small Pox, it consists of five blocks, three containing one large ward each, and the other two only partially divided, and provides but unsatisfactory accommodation for the treatment of small numbers of patients, or for the convenient separation of such cases as it may be desirable to isolate from others. It is also in many respects deficient in the accommodation and arrangements adopted in modern hospitals of this description.

No provision for eception of patients of better class.

Further, it is entirely without such small wards as might be set apart for the reception of patients of a better class, and who might be willing to avail themselves of such accommodation on payment of the usual charges, if such accommodation existed.

Fully utilized uring past year.

Nevertheless, with all its imperfections, the Borough Hospital has, during the past year, done good service; no fewer than 958 patients have been under treatment there, the bulk of them suffering from Scarlet Fever. During September and October, a special effort was made to get as many of these patients into hospital as possible, with the result that some 80 per cent. of the total number reported at that time were removed there; the wards were thus occupied to their utmost capacity, the number of inmates reaching upwards of 180, and for a short time cases had to be refused admission, which would otherwise have come. This led to the committee extending one of the blocks, and completing some other parts of the structure, which had never been finished, and thus increasing the accommodation by some 20 beds.

Alterations to uildings during year.

The accommodation for the nursing staff has also been rearranged and somewhat improved. A new disinfecting stove was obtained in the early part of the year, but unfortunately, it is not of the most approved description, hot air being used in its working, whereas it is now well known that an apparatus, in which steam under pressure is applied to the articles to be disinfected, is more satisfactory and reliable in every way. There has thus been during the year a considerable expenditure of an unusual character, but putting this aside, and taking the ordinary working expenses (*see accompanying tables*) connected with the maintenance and treatment of the patients, it will be evident to all familiar with hospital administration, that the work carried on there has been conducted in an economical manner. The results too, from a medical point of view, are highly satisfactory; the total deaths, amounting to 44, give a death rate per 100 patients of only 4·5; a mortality much below that usually met with in hospitals of this description.

STATISTICS OF FEVER HOSPITAL.

Detail of cases under treatment in the hospital during the 12 months ending December 31, 1885.

TABLE A.—General Summary.

Remaining under treatment, January 1, 1885 ..	34
Admitted during the year	924
Total number under treatment	958
Discharged cured	784
Died	44
Remaining in hospital, January 1, 1886	130
	958

TABLE B.

Shewing numbers of various diseases with death rate of each.

	Remaining in hospital Jan. 1, '85.	Admitted.	Recovered.	Died.	Mortality per cent.	Remaining Jan. 1, '86.
Scarlet Fever	33	900	760	43	4·6	130
Small Pox	0	8	8	0	0·0	0
Erysipelas	1	3	4	0	0·0	0
Unclassified	0	3	2	1	33·3	0
Quarantine	0	10	10	0	0·0	0
Totals	34	924	784	44	4·5	130

TABLE C.

Shewing Monthly Admissions of Scarlet Fever.

January	30	August	90
February	44	September	122
March	38	October........	121
April..........	64	November	88
May	63	December......	73
June	75		
July	92	Total....	900

TABLE D.

Shewing the Ages of Patients suffering from Scarlet Fever, and the Ages of those who died from same.

Ages of Patients.	No. Admitted.	No. of Deaths.
Under 1 year	3	0
From 1 to 2 years ..	32	0
,, 2 to 3 ,, ..	126	9
,, 3 to 4 ,, ..	129	11
,, 4 to 5 ,, ..	138	4
,, 5 to 6 ,, ..	108	7
,, 6 to 7 ,, ..	83	3
,, 7 to 8 ,, ..	74	4
,, 8 to 9 ,, ..	46	2
,, 9 to 10 ,, ..	27	2
Over 10 years......	134	1
Total	900	43

TABLE E.

EXPENDITURE.

	£	s.	d.
Provisions, Ale, Wine, &c.	1191	8	9
Fuel, Gas and Water	234	9	4
Furniture, Fittings and Repairs......	27	13	10
Repairs to Buildings...............	98	19	0
Drugs and Appliances	64	12	3
Salaries and Wages	460	15	6
Levies, Taxes, Fire Insurance........	7	2	9
New Disinfecting Apparatus, Grates, &c.	221	8	1
Bedding and Linen	160	7	2
Crockery and Cutlery	32	17	10
Horse, Harness, Van Repairs	27	16	1
Straw, &c.	18	12	0
Soap, Brushes and Sundries	11	1	10
Printing, Stationery, Advertising	16	18	0
Travelling Expenses, Nurses	5	11	4
Rent of Telephone.............	19	0	0
Sweeping Chimneys, &c.	16	2	9
Total ordinary Expenditure	2614	16	6
Extension and Alteration of Buildings	430	0	0
	£3044	16	6

From the foregoing Statement of Expenditure it will be seen that the ordinary expenses of the Hospital, including the removal of patients from their homes, has been £2614, and this sum includes several amounts which would not appear again, if, in the present year, the same number of patients should be admitted.

The total number under treatment having been 958, gives as the average cost of each patient, £2 13s. 6d.

Daily number of patients.

The daily occupation of beds for the year has been 103·75, and the average stay of each patient was 39·5 days, making the total cost per week, per patient, only 9/6. No doubt, this very low figure is in great measure due to the fact that the bulk of the patients have been children, the cost of their maintenance being less than would have been the case had a large proportion of them been adults.

III.

VITAL STATISTICS.

Area, Population, Density.—The present boundaries of the Borough of Leicester contain an area of 3030 acres, and the density of population as based upon the Registrar General's Returns, is about 42 persons per acre; that is to say, if the population were evenly distributed over the whole Borough, there would be some 42 souls living on every acre of ground. This statement, however, conveys no idea of the actual density of the population, for whilst some parts of the Borough are entirely unbuilt upon, others would shew an aggregation of persons amounting to treble the above average.

Density of population.

The population of the town was estimated in the middle of the year 1885 to be 136,147, but there is reason to believe, as shewn in the Medical Officer's Report for 1884, that these figures are somewhat too high. This estimate is based upon the assumption that the rate of increase which went on during the ten years ending 1881, has been continued since that time. These intercensal calculations must necessarily only be approximately correct, and the only means of checking them is afforded by an enumeration of the inhabited houses, which can be obtained with tolerable accuracy,* and then making a calculation in which it is assumed that the average number of occupants to each house is the same as at the last census; but here a source of fallacy also arises, seeing that the number of persons in each house may be slightly different from that of 1881. And it is the opinion of some competent to judge, that in parts of the town, especially amongst the dwellings of the artizan classes, many of the houses do contain a larger number of persons per house than that found at the last census.

Estimate of population probably too high.

Acting upon representations made to him last year, the Registrar General in his weekly returns now states that there is reason to believe that the population of Leicester may be somewhat over-stated, and that calculating from certain data supplied to him by the Sanitary Committee as to the number of inhabited houses, the death rate, as published weekly by him, would then be understated by about 1-15th. Seeing, however, that any method for estimating the population in intercensal years (as the Registrar General points out) can only give approximately accurate results, and as the populations of all the large towns are estimated upon one uniform plan, the numbers given by the Registrar General are adopted in this report, otherwise no just comparison can be formed between Leicester and other places.

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* Returns obtained from the overseers shew that there were in the middle of the year 26,794 inhabited houses, and 378 uninhabited. See Appendix.

Population.—Based on calculations above alluded to, the population of Leicester was estimated in the middle of the year 1885 to be 136,147, or an increase of 3374 over that estimated for 1884. The natural increase of population, that is to say, the excess of births over deaths, was last year 2041, thus leaving 1333 as the number of persons who came to reside in the Borough in excess of those, who during the same period, removed beyond its boundaries. Undoubtedly this is too high a figure, but it may fairly be expected that before the next census year shall arrive, the depression of commerce, through which the country generally has been passing, shall have given place to a revival of trade, and thus the average for the ten years ending 1891 approach approximately the increase which took place during the ten years ending 1881. The natural increase in 1885 was equal to a rate of 1·53 per 100.

Present estimated population.

Marriages.— The Marriages registered in the Borough during the year is 1114, the smallest number in any year since 1878, (see table I a, p. 32), the marriage rate was therefore equal to 16·3 per 1000: not a very high rate for a town with a large artizan population, though not so low as the rate recorded in some of our manufacturing towns during the last two or three years. One of the most trustworthy indications of prosperous times is afforded by the marriage rate, it rising when trade is good, and as surely sinking when any community is suffering from depression of trade.

Low marriage rate.

TABLE I a.

Shewing the Population, Inhabited Houses, Births, Deaths, and Marriages for the year 1885, and the ten preceding years.

Year.	Estimated Population.	Number of Inhabited Houses.	Births.	Deaths.	Marriages.
1875	111,000	22,193	4260	2889	1186
1876	113,581	22,848	4781	2558	1230
1877	117,462	23,695	4753	2515	1183
1878	119,845	24,438	4779	2500	1107
1879	117,610	....	4687	2651	1141
1880	120,325	....	4860	2960	1179
1881	123,120	24,974	4711	2654	1153
1882	126,275	25,511	4855	5228	1201
1883	129,483	25,818	4823	2484	1207
1884	132,773	25,937	4851	2937	1152
1885	**136,147**	**26,794**	**4682**	**2641**	**1114**

Note a.—Population at census, 1881, was 122,376.
,, b.—Area of present Borough in acres, 3030.
,, c.—Number of Inhabited Houses at census, 24,974.
,, d.—Average no. of persons per house at census, 4·9.

TABLE I b.

Shewing Annual Birth Rates and Death Rates, and Death Rates of Children, for the year 1885, and ten preceding years.

Year.	Birth-rate per 1000 of the Population.	Death-rate per 1000 of the Population.	Deaths of Children under 1 year per 1000 of Total Deaths.	Deaths of Children under 1 year per 1000 of Registered Births.	Deaths of Children under 5 yrs. per 1000 of Total Deaths
1875	38·37	26·02	356·8	242·0	554·8
1876	42·09	22·52	373·7	199·9	547·3
1877	40·46	21·41	356·6	188·7	498·6
1878	39·87	20·72	392·4	205·2	548·0
1879	37·31	21·10	331·1	187·3	513·0
1880	40·39	24·70	360 3	220·1	581·6
1881	38·26	21·56	363 2	204·8	517·7
1882	38·44	20·05	372·6	194·4	513·1
1883	37·0	19·2	367·5	190·7	511·6
1884	37·4	22·1	381·6	233·5	543·9
1885	**34·4**	**19 4**	**343 4**	**193·5**	**513·8**

Births.—The Births registered in 1885 were 4682, against 4851 in the year 1884, and were equal to a birth rate of 34·4. This is a little higher than the average rate for the 27 large provincial towns, which reached only 34·3 during the past 12 months. The average for the Borough for the past five years was 38·3. The rate during these five years was in 1880, 40·3; 1881, 38·2; 1882, 38·4; 1883, 37·0; and in 1884, 37·4. (See table I b, p. 32). These figures all being based on the Registrar General's estimate of population, and assuming that this estimate is too high, the figures will in a corresponding manner be slightly below the actual rates per 1000.

Low birth rate.

The total number of Births for 1885, compared with that for 1884, shews a decrease of 169.

The following table gives the figures for the past six years.

TABLE I.

NUMBER OF BIRTHS, AND THE BIRTH-RATE IN 1885, AND FIVE PRECEDING YEARS.

	1885	1884	1883	1882	1881	1880
MALES	**2369**	2483	2431	2458	2359	2435
FEMALES	**2313**	2368	2392	2397	2352	2425
TOTAL	**4682**	4851	4823	4855	4711	4860
Birth-rate per 1000.	**34·4**	37·2	37·3	38·4	38·2	40·2

Illegitimacy.—Of the 4682 births, 204 were registered as illegitimate, being in the proportion of about 1 in every 23. The proportion of illegitimate births has an important bearing upon the rate of infantile mortality, as it is always found that the mortality amongst illegitimate children, and especially amongst those under one year of age, is very much in excess of that of legitimate infants. (see page 43.)

Large numbers of unvaccinated children.

Vaccination.—The returns of Vaccination as supplied to me by the kindness of the Clerk to the Guardians, shew that during the past year only 1842 children have been successfully vaccinated, so that after all allowance has been made for deaths and removals, there must remain at the lowest estimate some 2000 children born during the year who have received none of the protection against small-pox, which this operation secures. In 1884 there were 4147 children not vaccinated (including deaths and removals, &c.,) in 1883 the number was 3079, and in 1882 it reached 2187. Since 1880, the number of unvaccinated children has rapidly increased, and at the present time the vaccination laws are in Leicester practically in abeyance.

To all those personally familiar with the ravages that small-pox makes, when it unfortunately attacks an unprotected individual, this accumulation of inflammable material, at the rate of more than 2000 a year, appears a matter of a most alarming character; and though happily hitherto, by prompt and energetic measures, this loathsome and dangerous disease has been successfully dealt with, it is to be feared that when this unprotected population shall have grown up and increased in numbers, a terrible Nemesis will overtake it in the shape of a disastrous epidemic.

Desirability of using animal vaccine.

Seeing that the objection to the operation is so wide-spread in the town, it becomes a matter for the serious consideration of those charged with the carrying out of the law, whether it would not be a wise procedure to encourage and provide facilities for the use of animal lymph, instead of that derived from the human subject, and thus try to meet some of the objections of the opponents of vaccination.

Deaths.—During the year, there have been registered 2646 Deaths as having occurred within the municipal boundaries; but as this number includes the deaths of persons brought within the Borough for the purposes of medical treatment, and excludes others taken outside the Borough for the same purpose, it requires correction as follows:—There must be subtracted therefrom, 42

Deaths after correction.

deaths of patients at the County Asylum and 39 at the Infirmary, and there must be added thereto 32 deaths of patients at the Borough Asylum, and 44 at the Borough Fever Hospital, thus leaving a corrected total of 2641, as the number of deaths properly belonging to the town; a decrease of 296 as compared with the previous year. The death rate for the year is therefore only 19·4 per 1000, and compares favorably with that of the 27 large English provincial towns, the death rate of which, for the same period, was 21·3. Only once during the past decennium has the death rate for Leicester been so low as that of the past year, and it is probably in part attributable to the diminished number of deaths from diarrhœa during last summer.

Death rate low.

The following table (Table II p. 36), shews that only five of the large towns had a lower death rate than Leicester in 1885.

The remarks made when considering the birth rate, apply in like manner to the deaths, viz.: that it is probably slightly under estimated, but if the various towns are to be fairly compared with each other, the basis upon which the calculations are made must be allowed to remain the same for each.

In considering the death rate of any town or population, and especially when comparing it with other towns, one important point is always to be borne in mind, in forming an opinion as to their relative healthiness or otherwise, *i.e.*, that unless due allowance be made for the varying age and sex distribution in the different communities, but especially the former, very erroneous conclusions may be arrived at, and a knowledge of *the death rates at various periods of life* is of much greater importance than the total death rate of the whole population. From the returns obtained at the census, these rates can be approximately obtained, and in Table III, p. 37, is shewn the death rate at eight different periods of life, and it is there seen that Leicester has a very high mortality in the ages under five years, but a comparatively low one in the later years of life.

The mortality in Leicester in children under five is very much above the average for the whole country, whilst it is below the average for most of the other periods.

TABLE II.

Death Rate of the large English Towns during each of the past 10 years.

	1876.	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.	**1885**
28 large Towns							**22.3**	**21·6**	**21·6**	**20·5**
London	22·0	21·5	23·0	22·7	21·6	21·2	21·4	20·4	20·4	19·7
Brighton	19·7	18·8	21·3	19·1	19·8	19·0	21·7	19·2	17·9	17·1
Portsmouth	22·8	18·0	19·9	17·6	19·8	19·7	21·5	18·6	19·4	19·7
Norwich	21·7	20·7	24·3	21·7	24·3	19·5	20·6	19·6	21·2	20·3
Plymouth	22·4	22·0	25·8	22·9	35·1	19·9	21·2	20·9	21·1	22·3
Bristol	23·1	22·5	22·2	21·9	21·0	19·6	19·2	17·9	18·4	19·7
Wolverhampton	24·0	24·4	23·5	23·0	21·3	21·2	22·4	21·3	23·4	20·2
Birmingham	22·7	24·1	25·5	22·1	20·7	20·0	20·9	21·3	21·4	19·3
Leicester	**24·1**	**22·6**	**22·1**	**23·2**	**25·0**	**21·8**	**20·0**	**19·2**	**22·1**	**19·4**
Nottingham	21·9	21·1	20·1	21·6	23·8	22·4	23·6	21·2	22·9	19·9
Liverpool	27·5	26·3	29·2	26·9	27·1	26·7	26·5	26·7	25·2	23·8
Manchester	30·2	28·5	29·2	28·3	26·9	25·5	26·7	27·6	26·4	26·5
Salford	29·6	26·4	27·1	26·7	28·0	22·6	23·2	22·4	22·3	21·1
Oldham	26·9	25·1	27·0	22·8	24·7	22·8	24·6	22·0	24·5	22·0
Bradford	25·2	23·3	24·1	22·9	22·9	19·7	21·2	18·4	20·1	17·7
Leeds	25·8	23·0	24·7	23·5	22·0	21·6	23·2	23·3	24·2	19·9
Sheffield	25·5	23·1	26·6	22·9	22·9	21·1	21·7	22·9	22·4	20·7
Hull	22·8	21·5	24·1	22·0	23·4	23·8	23·2	22·8	21·1	17·2
Sunderland	21·2	22·9	25·9	22·3	25·0	20·9	26·5	24·5	23·0	23·8
Newcastle	23·3	23·0	24·5	24·4	22·8	21·8	23·1	25·4	23·1	26·1
Derby										18·1
Birkenhead										19·5
Bolton										20·8
Blackburn										21·8
Preston										27·1
Huddersfield										20·1
Halifax										19·7
Cardiff										25·7

TABLE III.

The Death Rate per 1000, living at various groups of ages in 1885.

	Estimated Population.	Total Deaths.	Mortality per 1000.
All Ages	136,147	2641	19·4
Under 1 year ..	4,466	907	247·6
1 to 2 years	3,736	218	58·4
2 to 5 ,, ...	10,131	232	22·9
Total under 5 yrs.	18,333	1357	74·0
5 to 15 years ..	29,239	122	4·2
15 to 35 ,, ..	48,146	250	5·2
35 to 55 ,, ..	27,157	294	10·8
55 to 75 ,, ..	11,842	425	36·8
Over 75 ,, ..	1,415	193	136·4

True Comparative Death Rates.—From the knowledge obtained at the last census, we are enabled to properly compare the varying death rates of our large English towns.

In Table IV, p. 38, which is taken from the Registrar General's returns, the recorded and the corrected death rates for 1885 are shewn. Thus, in the first column, is given the actual death rate recorded for the past year in each of the 28 large English towns, whilst the second column shews what the death rate would have been had each town had a similar population, so far as age, distribution and sex are concerned.

Position of Leicester among large towns.

From this we find that Leicester occupies a by no means unfavorable position, standing seventh on the list. In column III. the death rate has been reduced to a standard of 1000, and shews that during the past year, after due correction for age and sex distribution, out of a certain number of persons living in all England and Wales, 1000 died, whilst out of the same number living in the 28 large towns, 1152 died. In Brighton (the lowest) 926, in Leicester 1069, and in Manchester (the highest) no fewer than 1553 deaths occurred amongst the same number of persons living.

TABLE IV.

Recorded and Corrected Death Rates per 1000 in Twenty-eight great towns in 1885.

Towns in the order of their corrected Death-rates.	Recorded Death-rate. I.	Corrected Death-rate. II.	Comparative Mortality Figure. III.
England and Wales	19·00		1000
England and Wales, less the 28 towns........	18·27	17·87	941
28 towns	20·54	21·89	1152
Brighton	17·08	17·59	926
Hull	17·19	17·73	933
Derby	18·08	18·81	990
Norwich	20·29	19·41	1022
Bradford	17·74	19·59	1031
Portsmouth	19·67	20·26	1066
Leicester	**19·4**	**20·31**	**1069**
Bristol	19·69	20·38	1073
Birmingham............	19·35	20·63	1086
Wolverhampton	20·17	20·80	1095
Birkenhead	19·47	20·82	1096
London	19·66	20·87	1098
Nottingham	19·92	21·11	1111
Leeds..................	19·94	21·31	1122
Halifax	19·66	21·36	1124
Huddersfield............	20·09	22·06	1161
Plymouth	22·34	22·12	1164
Sheffield	20·69	22·25	1171
Bolton	20·85	22·85	1203
Salford	21·11	22·98	1209
Blackburn	21·76	23·71	1248
Oldham	22·01	24·42	1285
Sunderland	23·84	24·82	1306
Liverpool	23·82	26·13	1375
Newcastle-on-Tyne	26·09	27·61	1453
Cardiff	25·66	27·85	1466
Preston	27·11	29·44	1549
Manchester	26·48	29·51	1553

Male and Female Mortality.—The deaths of males numbered 1340, and those of females, 1301.

The distribution of deaths through the four quarters of the year has been as follows, as compared with the same returns for 1884:—

	1885.	1884.
1st Quarter	750	623
2nd ,, ...	602	583
3rd ,, ...	746	942
4th ,, ...	543	821
Total	2641	2969

These figures shew that there has been a marked increase in the first quarter of the year under review, compared with that of 1884, whilst there was a still more marked decrease in the third and fourth quarters of the year.

On referring to table V., it will be seen that the age distribution of the deaths, in the four quarters, has also varied much.

TABLE V.

Deaths at various ages in 1885.

	1st Qrtr.	2nd Qrtr.	3rd Qrtr.	4th Qrtr.	Total.
Under 1 year	227	211	357	112	907
Between 1 and 5....	153	64	99	134	450
,, 5 ,, 15....	33	26	35	28	122
,, 15 ,, 35....	66	61	62	61	250
,, 35 ,, 55....	84	73	74	63	294
,, 55 ,, 75....	114	121	97	93	425
Over 75 years	73	46	22	52	193
Total......	750	602	746	543	2641

Deaths under and over 1 year of age in 1884.

	1st Qrtr.	2nd Qrtr.	3rd Qrtr.	4th Qrtr.	Total.
Under 1 year	191	169	513	260	1133
Over 1 year......	432	414	429	561	1836
Total......	623	583	942	821	2969

The increase in the first quarter was partly due to the prevalence of measles, whilst the marked decrease in the two last quarters is explained by the diminished fatality from diarrhœa and measles, as compared with the same periods in 1884.

Infantile Mortality.—Of the 2641 deaths occurring last year, no less than 907 were infants under one year of age, though this is less by 226 than the number for the previous year. The proportion of these deaths to the births registered was 193 per 1000, shewing a marked diminution from the rate of the preceding year, when it was as high as 233 per 1000. The rate for the whole country, during 1885, was equal to 138 per 1000, whilst the average of the twenty-seven large provincial towns was 161 per 1000.

Diminished infant death rate throughout country.

Table VI., p. 41, shews the rate in each of the large towns for this and the preceding year, and it will be noticed that there is a corresponding diminution in almost every town.

It is well known to all who are familiar with vital statistics, that Leicester has for many years held an undesirable pre-eminence for its high rate of infant deaths, and one of the first things that attract attention in studying the mortality returns for this town, is, that if it were not for this exceptional infantile mortality, Leicester would occupy a still more satisfactory position on the health roll than it even now does amongst urban populations, so far as its death rate affords a standard by which to judge.

In analyzing these infantile deaths, the broad fact comes out, that the chief causes assigned for them are three, *i.e.*, Convulsions, Diarrhœa, and Atrophy or Debility; these will be referred to again under their respective headings.

TABLE VI.

Infantile Mortality.

Deaths under One Year per 1000 Births.

	1884.	**1885.**	Average for 10 yrs. ending '84.
London	155	148	153
Hull	169	128	168
Brighton	147	131	152
Portsmouth ..	128	131	136
Halifax	176	132	164
Norwich	187	136	178
Derby	145	137	142
Birkenhead ..	140	137	144
Wolverhampton	189	140	161
Bradford	181	143	169
Bristol	143	152	147
Leeds........	184	155	176
Plymouth	150	156	158
Huddersfield..	163	157	173
Birmingham ..	174	157	167
Nottingham ..	196	157	179
Sunderland ..	166	158	158
Bolton	194	160	180
Sheffield	172	164	164
Oldham	183	166	170
Blackburn....	187	170	185
Newcastle	156	172	163
Salford	184	174	178
Liverpool	194	174	188
Manchester ..	183	175	174
Cardiff	184	189	163
Leicester ..	**233**	**193**	**206**
Preston	222	218	213
In 27 Provincial Large Towns	168	161	167

From Table VI., p. 41, we see that this year Leicester has slightly improved its position compared with the year 1884, the rate at Preston having exceeded ours by 25 per 1000. The mortality of infants in Leicester this year exceeds the average of the other large towns by no less than 32 per 1000, against an average excess of 39 per 1000 during the past ten years.

Causes of high infant death rate.

This excessive loss of life of young children has for many years occupied the attention of the Health Authorities of the Borough, and former Health Reports have regularly brought the subject prominently forward; and though the one great factor producing the excess over other towns is indisputably that of summer diarrhœa, yet it is to be observed that the number of deaths from atrophy and debility shew an abnormal amount of low vitality amongst infants under one year of age.

The influences at work in producing this lessened vitality are doubtless of various kinds; it has been pointed out in preceding years by the Officer of Health, that it is not improbable diarrhœa itself has some share in producing this diminished vital power, often resulting in such a weakened constitution to the sufferers, that, although they may not succumb immediately to the diarrhœa, they fall victims at a later period to a general wasting or debility. Again, like all large towns with an artizan population, it is found that a considerable proportion of the mothers leave their infants under the care of others, in order that they may go to the mill and to the factory, to work; improper feeding and maternal neglect has thus much to answer for in this respect, and early and improvident marriages amongst young couples themselves, often not fully developed, also give rise to a sickly and puny offspring.

Table VII. gives the total deaths, and the death rate per 1000 births, of the chief diseases which have proved fatal to these young infants.

TABLE VII.

Rates of Mortality per 1000 Births, under one year of age, of chief Infantile Diseases.

	1884. Total Deaths.	1884. Rate per 1000 Births.	1885. Total Deaths.	1885. Rate per 1000 Births.
From all causes	1133	233·0	907	193·0
Atrophy and Debility	243	50·1	242	51·7
Diarrhœa	276	56·9	168	33·7
Convulsions	215	44·3	133	28·4
Lung Diseases	136	28·0	113	24·1
Premature Birth ..	75	15·5	78	16·6
Tubercular dis.	39	8·0	38	8·1
Measles	14	2·9	12	2·5
Scarlet Fever	4	0·8	6	1·3
Whooping Cough ..	28	5·8	21	4·5

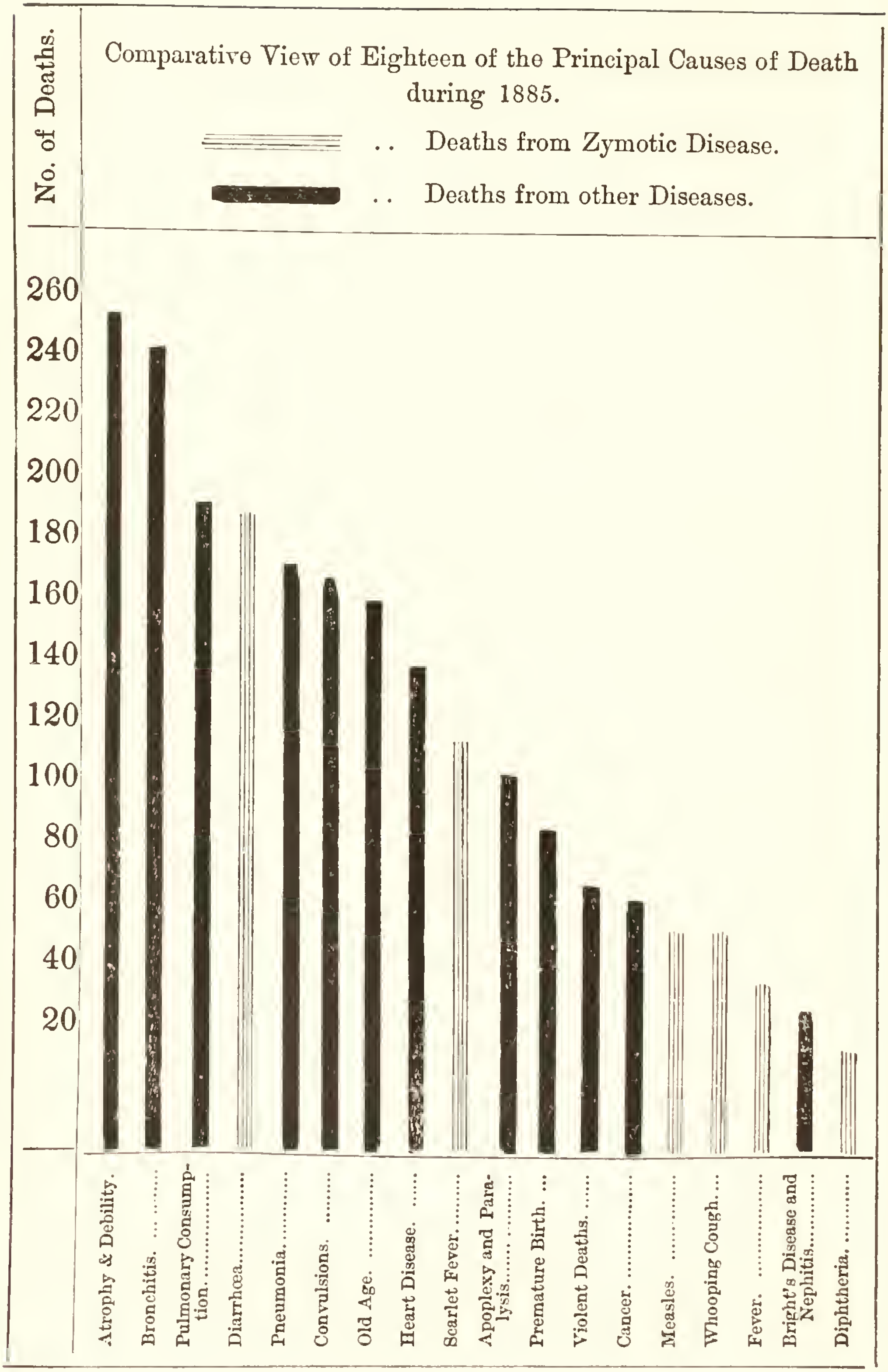
Illegitimacy in relation to infantile mortality.

The influence of illegitimacy upon the infantile death rate deserves a passing notice. It has been stated elsewhere that 204 births were registered during the year as being illegitimate, whilst the number of deaths of illegitimate children under one year of age was no less than 78, being more than 38 per cent of these births; or to put it in a more striking light, whilst out of every 1000 children born in wedlock, 185 die before attaining the age of 12 months, amongst the illegitimate, 382 per 1000 die, being more than double the mortality of the legitimate births.

Classification of causes of death.—Upon separating the deaths into the various groups, according to the divisions hitherto adopted in Leicester, we find that they will be divided as follows:

	1885. Total Deaths.	1885. Rate per 1000 living.	1885. Per cent of Total Deaths.	1884. Total Deaths.	1884. Rate per 1000 living.	1884. Per cent of Total Deaths.	1883. Total Deaths.	1883. Rate per 1000 living.	1883. Per cent of Total Deaths.
1 Zymotic dis. ..	518	3·8	19·6	640	4·8	21·4	397	3·0	15·6
2 Constitutional	338	2·4	12·8	377	2·9	12·6	337	2·6	13·3
3 Local	1143	8·4	43·3	1302	10·1	43·5	1181	9·1	46·6
4 Developmental	528	3·9	19·9	565	4·4	18·9	525	4·0	20·7
5 Violence	74	·54	2·8	79	·62	2·6	63	·49	2·4
6 Ill defined and not specified	40	·29	1·5	24	·19	·80	26	·20	1·0

The following diagram shews, in a graphic form, the relative mortality from eighteen of the more important causes of death in 1885.



Comparative View of Eighteen of the Principal Causes of Death during 1885.

Distribution of Deaths amongst Wards.—Owing to the absence of an accurate enumeration of the present population of the various Wards, it is not possible to calculate with exactitude the death rate for these various divisions of the town.

Ward mortality

The total deaths have been distributed through the Wards, as shewn in Tables VIII. and IX., in which the deaths at the various public institutions have been distributed to the Wards from whence they come.

TABLE VIII.

Distribution of Deaths in Wards at various groups of ages.

	All Ages.	Under 1 year.	1 year to 5.	Over 5 years.	Estimated Population*	Ward Mortality per 1000 living.
1 St. Martin's Ward ..	33	12	7	14	2189	15·1
2 N. Margaret's ,, ..	338	137	70	131	14559	23·2
3 M. ,, ,, ..	652	263	107	282	36062	18·8
4 E. ,, ,, ..	627	182	69	376	32842	19·1
5 E. Mary's ,, ..	116	26	14	76	9956	11·7
6 W. ,, ,, ..	535	149	101	285	24947	21·4
7 All Saints' ,, ..	340	138	68	134	15585	21·8
Total ..	2641	907	436	1298	136140	

* This estimate is based upon the assumption that the average number of persons in each house is at the present time 5·08, as against 4·90 at the last census, thus keeping the estimate of total population uniform with that as returned by the Registrar General.

TABLE IX.

Distribution of chief Zymotic Deaths in the different Wards, and of four other important groups.

	Six chief Zymotic dis.	Diarrhœa	Devel-opm'l.	Acute Resp'raty	Phthisis	Convul-sions.
1 St. Martin's Ward ..	5	4	7	5	2	2
2 N. Margaret's ,, ..	36	21	59	62	20	27
3 M. ,, ,, ..	77	52	141	108	50	46
4 E. ,, ,, ..	42	37	141	84	48	33
5 E. Mary's ,, ..	5	2	17	30	7	4
6 W. ,, ,, ..	71	37	82	101	37	30
7 All Saints' ,, ..	37	33	62	69	22	27

N.B.—The mortality of the fourth, or East Margaret's Ward, is a little over-stated, as owing to the absence of the necessary information, the deaths in the workhouse, which is situate in this Ward, cannot be distributed to the districts from whence the patients came.

Table VIII., p. 45, is an especially instructive one, as it shews that the mortality has varied in the different Wards from 11 to 23 per 1000.

Variations in death rate of ifferent Wards.

In St. Martin's, where a rate of 15 prevailed, the explanation is to be found in the fact of its being the centre of the town, largely made up of houses used for business purposes, and thus a larger proportion of adults in the prime of life is found here, than elsewhere.

In East St. Mary's, the Ward where the population is least dense, and whose inhabitants belong largely to the more affluent classes of society, the death rate is only one half that obtaining in less favored and more densely crowded Wards of the Borough.

Class I.—ZYMOTIC DISEASE.

Zymotic Death Rate.—The total number of deaths in this class has been 518, giving a zymotic death rate of 3·8, as against a total of 640, with a rate of 4·8 per 1000 for the year 1884; but it should be stated that the deaths included in this group by the classification hitherto adopted in Leicester, takes in deaths from rheumatism, quinsy, croup, parasitic and dietic diseases, diseases which in more modern classifications are placed under other headings; this fact causes an increase of ·4 per 1000 in this group, as compared with the classification now generally in vogue.

Miasmatic death rate.

The deaths from the seven common zymotics, viz.: small pox, measles, scarlatina, whooping cough, fever, diphtheria and diarrhœa have been 453. The first six of these constitute the group termed miasmatic, and numbered only 267, giving a miasmatic death rate of 1·9 per 1000, a rate which will compare very favorably indeed with the other large towns of the kingdom.

iseases r'port'd under the otification Act.

During the year there have been received 2203 certificates of infectious disease, by means of which there have come to the knowledge of the Sanitary Authority, 2397 cases of disease which were as follows: 1816, scarlet fever; 55, diphtheria; 8, small pox; 8, puerperal fever; 216, typhoid fever; and 294, Erysipelas.

Notification of erysipelas not much service.

As mentioned in an earlier part of this report, a large proportion of the cases of erysipelas are of a very trivial character, and seeing that this disease is not one that seriously endangers the health of the community at large, even when it exists in a severe form, it is worth consideration whether steps should not be taken to erase this from the list of diseases which have to be notified under the Leicester Corporation Act, 1879, as incurring unnecessary expense.

The following statement shews the distribution of these diseases through the four quarters of the year.

	Scarlet Fever.	Typhoid Fever.	Diphtheria.	Erysipelas	Puerperal Fever.	Small Pox.
1st Quarter	226	19	6	77	1	1
2nd ,, ...	429	50	15	61	5	6
3rd ,, ...	550	110	17	62	1	1
4th ,, ...	611	37	17	94	1	0
Total no. of cases for the year 1885	1816	216	55	294	8	8

Distribution of nfectious disease in Boro'.

In considering the distribution of these zymotic diseases throughout the town, it is found that the cases of typhoid fever have been scattered without any special incidence on particular districts

The cases of scarlet fever have also been distributed, more or less uniformly, in the lower parts of the Borough, the Highfields district shewing the least prevalence. If reference be made to the map at the end of this report, the exact localities of deaths will be seen, and this may be taken as agreeing generally with their respective prevalence. It will also be noticed that the whole district south of the Midland Railway has had much fewer zymotic deaths, and therefore cases in proportion to its population, than that part of the town to the north of the rail. This is, no doubt, in great measure due to the class of houses which predominate here, and to the fact that the sanitary conditions generally are more conducive to health, than in the older parts of the Borough; but it is to be noted that on the opposite side of the town, in a comparatively new district, lying between the Hinckley Road and King Richard's Road, the incidence of scarlet fever was very severe.

The annexed table shews the Ward distribution of deaths from the seven principal zymotic diseases.

TABLE X.

Deaths from Seven Chief Zymotic Diseases in 1885, distributed into Wards.

	Whooping Cough.	Small Pox.	Measles.	Scarlet Fever.	Diphtheria.	Fever.	Diarrhœa.	Total.
St. Martin's Ward	2	0	1	2	0	0	4	9
N. Margaret's ,,	8	0	8	15	1	4	21	57
M. ,, ,,	21	0	16	24	3	13	52	129
E. ,, ,,	11	0	3	14	7	7	37	79
E. Mary's ,,	1	0	0	3	1	0	2	7
W. ,, ,,	5	0	8	44	2	6	37	102
All Saints' ,,	4	0	15	11	1	6	33	70

On comparing these deaths with the numbers of the past ten years (as seen in Table XI.), it is to be noted that whilst those from small pox, whooping cough, and diarrhœa, are below the average, scarlet fever, diphtheria, measles, and typhoid fever, are somewhat above the average annual deaths for the same time.

TABLE XI.

Annual number of deaths from Chief Zymotics in each of the years 1875 to 1885.

	1875	1876	1877	1878	1879	1880	1881	1882	1883	1884	Average for 10 years.	1885	Death Rate per 1000. 1885
Small Pox......	0	0	6	1	0	0	2	5	3	0	1·7	0	0
Measles.........	49	50	40	45	72	166	7	74	15	57	57·5	52	0·38
Scarlet Fever	175	173	33	12	105	119	184	72	91	63	102·7	113	0·83
Diphtheria ...	7	10	9	5	11	23	11	5	6	11	9·8	14	0·10
Whooping Cough..... ...	91	33	65	82	61	27	122	19	59	66	62·5	52	0·38
Fever	64	43	20	31	21	46	29	19	10	16	29·9	36	0·26
Diarrhœa	308	263	185	302	88	398	193	214	148	344	244·3	186	1·4
Total......	694	572	358	478	358	779	548	408	332	557		453	

Small Pox.—No deaths occurred from this disease in the year now under review. Eight cases only came to the knowledge of the Health Authorities, and these all recovered under treatment at Hospital. The average annual number of deaths for the past ten years has been 1·7.

Mortality nil.

Measles.—Fifty-two deaths were caused by measles, and the largest number occurred in the first quarter of the year, owing to a continuance of the epidemic, which was prevailing at the close of 1884. The average number per annum during the previous ten years was 57·5: the following figures shew the distribution throughout the four quarters of 1885.

Epidemic prevalence in early part of year.

1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.
43	8	1	0

Probably no disease varies more than this in its prevalence, and if the little patients who are the chief sufferers from it were more carefully and properly nursed, the mortality would shew a marked decrease.

The total number of deaths in the twenty-seven large towns, with an estimated population of 4,806,000, was last year 3220, giving a death rate per 1000 of 0·67; the death rate in Leicester from this cause being 0·38.

Death rate f Measles.

Scarlet Fever.—This disease has, with the exception of diarrhœa, been more fatal than any other zymotic, having caused 113 deaths during 1885, compared with 102·7 as the average annual number during the preceding ten years. Table XII., p. 50, shews that there have come to the cognizance of the Health Department 1816 cases within the Borough, so that the mortality per cent. of cases was 6·2. It is of some interest to compare the mortality amongst the patients treated in the hospital with those treated in their own homes. The deaths at the hospital were 43, amongst a total of 933 under treatment, giving a death rate of 4·6 per cent., whilst of the remaining 883 patients who were kept in their own homes, 70 died, shewing a death rate of 7·9 per cent. Thus it may fairly be concluded that, though the removals to hospital did not bear a sufficiently large proportion

Comparison of mortality of cases treated in hospital with others.

to the whole number, to effect the eradication of the disease, still the results obtained there in the saving of life are so far satisfactory.

Death rate from Scarlet Fever.

The average mortality during 1885 from scarlatina, in the 27 large provincial towns, was equal to 0·29, and in Leicester to 0·83 per 1000. Next to Leicester, scarlet fever was most fatal in Sunderland, Preston and Leeds, whose death rates were 0·85, 0·69 and 0·63 respectively.

Mortality at different ages.

Upon analysing the age of the patients who suffered from this disease, and the ages of those who died from it, a fact which is already fairly well-known, stands out clearly, viz.: that the highest death rate for scarlet fever is in the earlier years of childhood, and that, after reaching five years of age, the danger of deaths therefrom is very much diminished. This is well seen in Table XII.

TABLE XII.

Shewing Mortality at different ages amongst persons suffering from Scarlet Fever.

Age.	Cases.	Deaths.	Death-rate per cent.
Under 1 year ..	24	6	25·0
1 to 2 years	174	30	17·2
2 to 3 ,, ...	242	25	10·3
3 to 4 ,, ...	276	16	5·8
4 to 5 ,, ...	217	13	5·9
5 to 6 ,, ...	219	6	2·7
6 to 7 ,, ...	152	5	3·2
7 to 8 ,, ...	143	3	2·1
8 to 9 ,, ...	90	3	3·3
9 to 10 ,, ...	58	2	3·4
Over 10 years ..	206	4	1·9
Ages not known ..	15	0	
Total	1816	113	6·2

Result of efforts to check spread of Scarlatina.

It has been asserted by some that all our endeavours to cope with Scarlatina are unavailing, and that the utmost we accomplish is to prolong the period over which an epidemic extends; and that the means taken to prevent it spreading only result in preventing it from running its course as rapidly as in former times, when a sharp outbreak would occur with a large number of deaths, and then subside for a time almost entirely. If, however, it should be shewn that by prolonging the duration of each epidemic period the severity of the type is diminished, or that the time of life at which the patients suffer be postponed beyond the first four years of life, an undoubted gain in the saving of life is the result.

Epidemic prevalence in Leicester.

For the past six years Leicester has never been even approximately free from Scarlatina, nor since the first month of 1879, have four weeks passed away without a death occurring from it, and during this time, the deaths have ranged from 2 and 3 to 30 per month, reaching the maximum in the middle of 1881. (See Table XIII). At the time of writing, however, there appears to be some hope of a real diminution of this long continued scourge.

TABLE XIII.

Deaths from Scarlatina during each lunar month of the following years.

Year.	I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	X.	XI.	XII.	XIII.	Tot.
1879	0	1	4	1	4	2	1	7	13	20	15	19	20	107
1880	12	7	4	13	6	7	3	4	12	5	16	12	17	118
1881	12	6	9	6	7	11	18	18	31	24	19	19	12	192
1882	6	12	5	2	2	2	2	2	3	9	11	7	8	71
1883	4	2	3	3	8	7	6	3	5	5	12	15	18	91
1884	8	12	5	2	7	5	2	3	4	2	3	5	5	63
1885	**2**	**10**	**5**	**6**	**3**	**9**	**4**	**14**	**9**	**15**	**10**	**10**	**16**	**113**

Milk Supply, &c in Scarlatina.

Special efforts have been made to ascertain if possible whether there were any local conditions favoring its long continued prevalence. For some weeks the milk supply to every case was traced and noted without yielding any results, and a comparison of its prevalence with the condition and ventilation of the sewers also gave no positive results; for, as noted above, in the district lying on the hill side by the Hinckley Road, where the soil and the drainage may be considered as favorable for health as any part of the Borough, the disease was for a time most prevalent.

Diphtheria.—Diphtheria has caused 14 deaths during the past year. In 1884, 11 deaths were referred to this disease. The number of cases reported has been 55, giving a rate of deaths to attacks of 25·4 per cent. The annual death rate in Leicester per 1000 persons living was 0·10, as compared with 0·11 in the 27 large provincial towns. This disease has, during the past few years, shewn a marked tendency to become more prevalent, especially in the rural districts of the country. The exact conditions which tend to produce and disseminate this affection are still but imperfectly known, though numerous observations appear to show that dampness of dwellings is one important factor.

Death rate from Diphtheria.

Whooping Cough.—This is a disease over which a Health Authority can exercise but little control. A disease which in itself should not cause much loss of life, if properly treated, it comes nevertheless to play an important part in the total amount of infantile mortality. Properly nursed and tended, the deaths from whooping cough might be diminished by one half. During 1885, it caused 52 deaths as against 66 in the preceding year, the mortality per 1000 persons living being 0·38, whilst the mortality in the 27 large provincial towns was 0·59, so that Leicester compares favorably with other towns of a similar character.

eath rate from Vhoopingcough

Fever, including Typhoid and Simple Fever.—Under this term are included typhoid or enteric, typhus and simple continued fever; practically, however, these may all be looked upon as typhoid, typhus being conspicuous by its entire absence from Leicester.

The number of cases reported during 1885 has reached a total of 216, distributed through the year as follows :

1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
19	50	110	37

These figures shew an unusual prevalence in the second quarter of the year, but they were not confined to any special districts ; of the 216 cases, 36 proved fatal, against 16 in the preceding year, shewing a death rate per cent of 16·6 of persons attacked.

Death rate from Typhoid

The death rate of the Borough, per 1000 of the population, from fever, for the past year was 0·26, exactly corresponding to the average rate for the 27 largest English provincial towns.

The average number of deaths per annum in Leicester during the past ten years from fever has been 29·9.

Diarrhœa.—Leicester has improved its position on the death roll of this disease during the year 1885 ; instead of being at the bottom of all the large towns, it is now bottom but one, taking precedence of Preston, which shews a higher death rate than our own Borough.

Diminished number of deaths from Diarrhœa.

The total number of lives lost from diarrhœa was 186, of which 168 were infants under one year of age, and 181 were under five years of age, being little more than half the total numbers recorded in 1884.

Low mortality throughout country.

The mortality from diarrhœa throughout the country was much below the average, the cause of this being found in the low temperature prevailing at the end of the summer ; for amongst the little that is with certainty known in connection with the causation of this disease, the fact of a high temperature being the exciting factor, whatever may ultimately be proved to be the direct cause, is undisputed.

The distribution of deaths during the summer months was as follows :

In June—3 ; July—76 ; August—76 ; September—15 ; and on reference to the Meteorological Chart in the Appendix, it will be seen that the onset and decrease corresponded with the rise and fall of temperature as there shewn. When the temperature reached 65° to 70° F., there was a rapid onset of the disease, and when it fell below 65°, there was as marked and rapid a cessation.

The average mortality in the 27 large towns was last year 0·70 per 1000, whilst the three towns that shewed the highest rates were Salford, Leicester and Preston, with a rate of 1·2, 1·4 and 1·9 respectively. Leicester thus exceeded the average rate by 100 per cent, so that for each death from diarrhœa in each of the 26 other large towns, two occurred in Leicester.

Age of persons attacked with Diarrhœa.

Although it is impossible to estimate with any accuracy the number of persons who have, during the year under review, suffered from this disease, still the following figures are not without interest as shewing that the attacks are confined to no one period of life, and that although the fatal cases occur almost entirely amongst those under five years of age, the persons attacked during that period of life form not more than *one eighth of the total* number of those who suffer from diarrhœa; that is to say, that for every person under five years of age who gets an attack of this disorder, there are seven above that age who suffer in the same way.

These figures are obtained from the books kept at the stations where diarrhœa mixture is distributed gratuitously, particulars being kept of each patient for whom it is supplied.

Number and Ages of Patients suffering from Diarrhœa, in 1885, to whom Medicine was supplied from Stations.

Under 1 year ..	135	5 years to 6 ..	41	10 years to 20 ..	386
1 year to 2 ..	355	6 to 7	61	20 to 60.. ..	1557
3 to 3	151	7 to 8	40	Over 60 years ..	261
3 to 4	88	8 to 9	46		
4 to 5	68	9 to 10	43	Total all ages ..	3432

Treatment of Diarrhœa.

Seeing that all endeavours hitherto have been without avail in Leicester, in checking the unusual prevalence of diarrhœa during the summer months, it may not be thought out of place, as an effort to reduce the mortality arising therefrom, to allude to a method of treatment advocated by Dr. Meadows of this town, details of which were given in a paper read by him during the past year, and which in his hands has proved more successful than any other hitherto adopted. It consists essentially in the administration of small doses of Mercuric Chloride, (1-64th of a grain for infants) frequently repeated during the first 12 or 24 hours. Without going into any theories as to how it may act, or whether the beneficial result is due to its known powerful action as a germicide, it is at least desirable that it should be tried during the coming summer by all those medical men in the town who may have to treat this disease. The combined observations of the whole of the profession would soon decide whether it has or has not the specific effect attributed to it.

Desirability of combined observation.

Erysipelas.—The total number of cases reported as being Erysipelas were 294, but as only seven deaths were recorded therefrom, it is evident that the term Erysipelas must have had a very elastic meaning.

Class II.—CONSTITUTIONAL DISEASES.

The deaths from this class of disease numbered 338, forming something more than twelve and a half per cent of the total deaths. The two most important groups in this class are the deaths from Cancer and from Phthisis, the numbers being, Cancer 63 deaths, Phthisis 197, the former shewing an increase of 18 on the previous year, and the latter a decrease of 35.

Increase of cancerous diseases.

From the figures published yearly for the whole country by the Registrar General, it would appear that Cancer is a disease which is on the increase in England, though, on the other hand, greater accuracy in diagnosis on the part of medical practitioners may help to explain some of this apparent increase.

Mortality from Phthisis.

The deaths from Phthisis were equal to a death rate of 1·4 per 1000 per annum.

Class III.—LOCAL DISEASES.

In this class are contained the largest number of deaths, 1143 being referred to it in 1885. Past years have shown throughout the country, a marked diminution in the number of deaths from zymotic disease, as a result of the work of the sanitarian; but in the future it is probable that in a decreased mortality from these local diseases, the beneficial results of improved hygienic conditions in the homes, persons and habits of the people, will be chiefly seen.

Convulsions, one of the groups of disease belonging to this class, was responsible for no less than 169 deaths, 132 of which were infants under one year.

Referring to the diagram (page 44), it will be seen that convulsions stand sixth on the roll of mortality, in point of numbers, and is an important factor in the infantile death-rate; but, as is well-known, convulsions is often only a symptom of some other disease, and may be due to various causes, and is therefore to that extent unsatisfactory as a classification.

Class IV.—DEVELOPMENTAL DISEASES.

The diseases included in this class caused 520 of the total deaths: 82 being set down as due to premature birth, and 252 to the vague heading—atrophy and debility. These latter deaths were all of children under 2 years of age.

Unsatisfactory classification of death.

Referring again to the diagram on page 44, it is seen that the deaths from Atrophy and Debility are more in number than from any other disease, and one naturally asks the reason. As a classification it is practically of very little value, as these terms merely represent a *condition at*, not a pathological *cause of death*; the true causes producing this atrophied or wasted state being numerous. Chief amongst these is probably a weakly, puny, ill developed condition at birth, often the result of too early and improvident marriages, for, as one of your former Medical Officers (Dr. Crane) observed, many of these infants are born dying.

Causes of Atrophy and Debility.

Then again, well defined inherited diseases, such as syphilis, tuberculosis, struma, and the like, have their share in producing these deaths; whilst improper feeding, maternal neglect, and overcrowding and unhealthy surroundings generally, all contribute their quota to swell the numbers of this large group. In speaking of infantile mortality from diarrhœa, it was shewn that this disorder may doubtless be considered the cause of many of these deaths from Atrophy, the constitutions of the sufferers being so profoundly affected, and the nutritive processes interfered with, that the system never recovers therefrom.

The bulk of the remaining deaths from Developmental diseases are those from old age, 115 being persons upwards of 75 years of age ; this group is one which the sanitarian in the future hopes to see become larger year by year.

Class V.—DEATHS FROM VIOLENCE.

Includes all those deaths the result of accident, negligence, and suicide ; the total of these was 74, being at the rate of 2·8 per 1000 of the population.

Class VI.—ILL-DEFINED.

This includes all those deaths the cause of which was not stated, or the causes assigned for which were so vague as not to admit of classification under any of the former headings. The total number of these was 40.

Proportion of Inquests.

Inquests.—The number of enquiries into the cause of death reported to have been held by the coroner during the year is 248, 146 males and 102 females, being at the rate of 1·8 per 1000 of the population, or 9·4 per cent. of the total deaths. These 248 inquests included all the 74 deaths from violence in Class V., while the remainder were made up of those persons who had either died without medical attendance, or had died under such conditions that the medical attendant did not feel justified in giving a certificate of the cause of death.

The proportion of inquests appear high in comparison with many other towns, but it is more satisfactory that the number of inquests should be large, rather than the number of uncertified deaths.

Proportion of uncertified deaths.

Uncertified Deaths.—These, during the year, numbered fifty-two, being at the rate of 1·9 per cent. of all the deaths. This compares favourably with the same rate in the other large provincial towns, in which the per centage was 3·2.

In London the proportion was only 1·2 per cent. of the total deaths, whilst it ranged as high as 4 per cent. in Salford, 4·8 in Liverpool, 4·3 in Huddersfield, 5·5 in Hull, 6·1 in Sheffield, and 7·5 in Oldham.

Of the fifty-two uncertified deaths, 44 were infants under one year of age, the bulk of which had premature birth assigned as the probable cause of death.

APPENDIX.

APPENDIX.

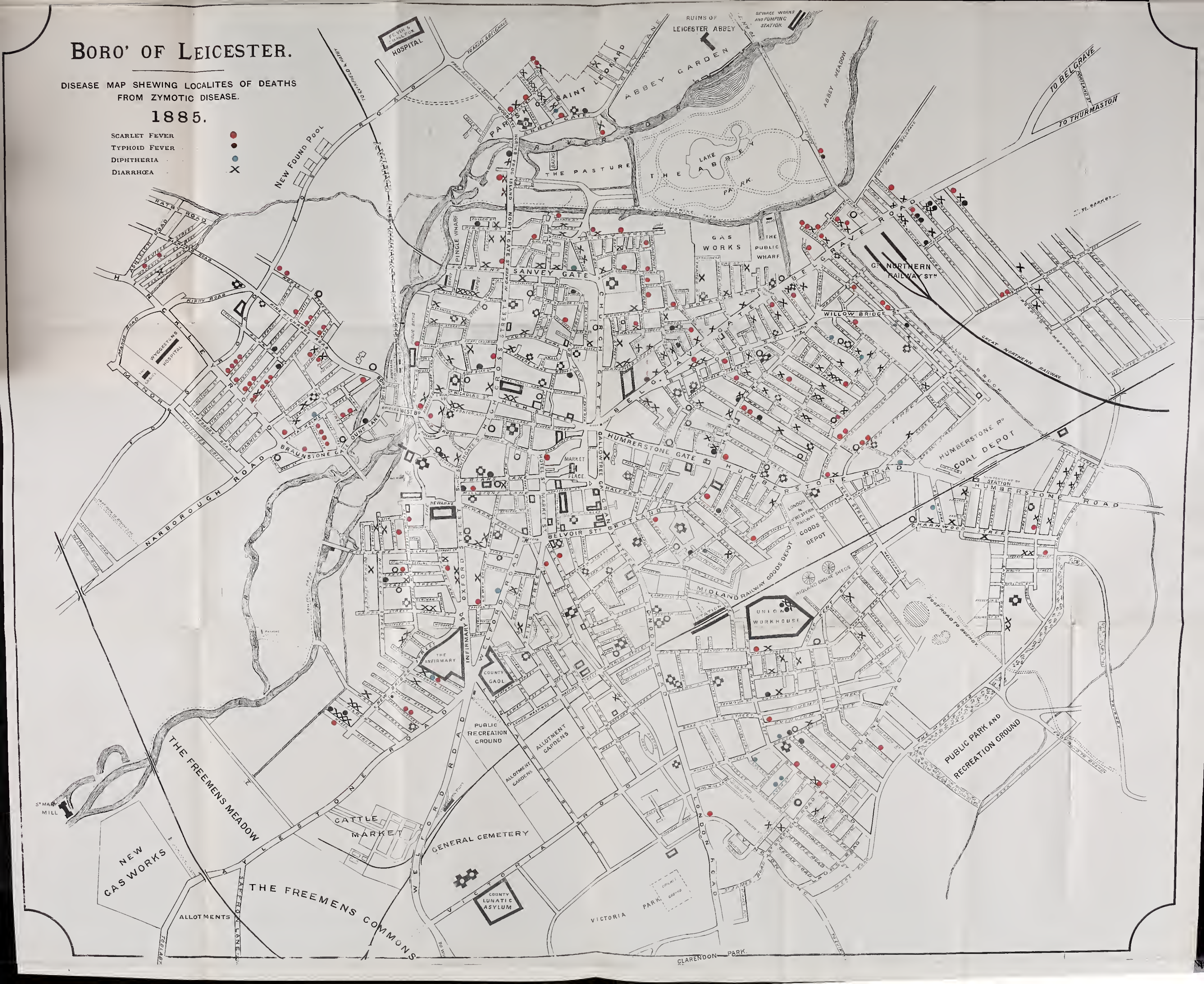
1. Overseers' Returns of Inhabited Houses.

2. Meteorological Returns.

3. Distribution of deaths from infectious diseases through the various wards.

4. Classified Table of Deaths Registered during 1885.

5. Map of Borough showing localities of deaths from infectious disease.



BORO' OF LEICESTER.

DISEASE MAP SHEWING LOCALITES OF DEATHS FROM ZYMOTIC DISEASE.

1885.

ROYAL COLLEGE OF SURGEONS OF ENGLAND
21 MAY 90
LIBRARY

OVERSEERS' RETURN.

Number of Inhabited and Uninhabited Houses within the Borough of Leicester, on the 1st of July, 1881, 1882, 1883, 1884, and 1885.

Parish or Township.	1881		1882		1883		1884		**1885**	
	In-habited.	Unin-habited.	In-habited.	Unin-habited.	In-habited.	Unin-habited.	In-habited.	Unin-habited.	In-habited.	Unin-habited.
St. Margaret	16565	503	17020	450	17233	432	17484	351	17571	237
St. Mary	5237	156	5252	139	5255	173	5306	120	5344	100
St. Martin	395	21	402	14	401	15	388	23	392	17
St. Leonard	562	36	583	17	589	14	598	6	602	2
St. Nicholas	374	8	368	4	379	6	385	3	383	9
Black Friars	458	6	478	2	482	4	483	2	503	1
Augustine Friars ..	22	.....	22	......	21	1	22	......	19	3
The Newarke	353	2	355	....	355	......	352	3	356	2
The Castle View ..	30	1	31	......	31	......	31	......	31	0
All Saints	1473	16	1477	13	1485	9	1485	9	1590	7
	25469	749	25988	639	26231	654	26534	517	26794	378

METEOROLOGICAL RETURNS,

Births, Deaths, and Mortality from Zymotic Diseases, &c., for each week of 1885.

Week.		Thermometer.								Deaths.			Deaths from								
No.	Date of ending.	Highest.	Lowest.	Mean.	Humidity. Mean.	Rainfall.	Wind Veloc. miles average per day.	Barometer. Mean.	Births.	All ages.	Under 5.	Over 5.	Small Pox.	Scarlet Fever.	Measles.	Diptheria.	W. Cough.	Fever.	Diarrhœa.	Respiratory.	Phthisis.
1	Jan. 10	41·4	30·0	37·6	89	0·74	221·5	29·919	99	81	39	42	..	..	11	..	2	..	1	26	10
2	,, 17	37·8	32·3	35·3	89	0·42	275·3	29·748	83	56	21	35	..	..	7	..	..	..	..	13	4
3	,, 24	34·3	28·7	31·2	88	0·01	75·8	30·099	104	77	44	33	..	1	8	..	4	..	2	20	4
4	,, 31	47·8	38·1	43·0	90	0·60	306·1	29·594	103	54	25	29	..	1	2	..	2	..	..	10	..
5	Feb. 7.	48·1	36·9	42·5	86	0·52	316·9	29·300	107	62	32	30	..	3	3	..	3	..	..	16	5
6	,, 14	51·6	39·7	46·4	90	0·59	268·4	29·814	94	50	23	27	..	4	3	..	2	..	..	12	2
7	,, 21	42·0	31·8	36·7	90	1·26	180·1	29·646	80	52	25	27	..	..	1	..	1	1	2	12	2
8	,, 28	52·4	40·1	46·3	89	0·31	275·5	29·819	93	48	20	28	..	3	2	..	..	..	..	14	4
9	Mar. 7	44·9	32·7	38·3	91	0·34	175·7	29·741	91	58	29	29	..	1	1	1	..	..	1	11	3
10	,, 14	46·2	34·6	39·4	84	0·14	165·0	30·384	96	53	33	20	..	2	1	..	1	1	1	13	2
11	,, 21	50·5	32·6	41·5	84	0·41	174·2	30·018	76	56	25	31	..	1	2	..	1	..	..	15	2
12	,, 28	46·5	33·8	40·1	77	0·12	187·1	30·152	114	63	27	36	..	1	1	..	1	..	..	7	8
13	April 4	50·5	34·9	42·0	80	0·61	165·9	30·087	92	40	20	20	..	1	..	..	2	..	1	15	..
14	,, 11	47·1	35·1	41·5	84	0·70	196·3	29·556	109	59	24	35	..	..	..	..	..	..	..	12	4
15	,, 18	51·5	36·8	43·5	86	0·86	131·2	29·944	111	58	22	36	..	2	..	1	..	1	..	11	6
16	,, 25	63·8	43·4	52·9	64	0·12	266·7	29·828	97	48	25	23	..	3	1	..	2	1	..	9	..
17	May 2	59·9	42·1	51·1	70	0·21	131·8	29·658	101	52	26	26	..	..	..	..	..	2	1	5	5
18	,, 9	51·9	37·9	44·6	75	0·57	180·7	29·644	91	39	16	23	..	..	2	..	3	2	..	5	3
19	,, 16	53·9	37·0	45·6	66	0·24	148·0	29·935	92	48	20	28	..	1	1	1	2	..	..	8	5
20	,, 23	54·6	39·8	47·5	73	1·21	185·4	29·605	80	47	25	22	..	2	1	..	..	..	2	17	4
21	,, 30	62·4	46·0	54·0	74	0·34	194·7	29·901	75	52	20	32	..	1	2	1	1	1	..	6	7

22	June 6	71·2	48·9	60·0	60	0·92	174·9	30·026	88	40	16	24	..	3	..	..	1	2	..	6	4
23	,, 13	67·0	47·4	57·2	71	0·83	103·9	30·123	104	43	17	26	..	2	..	..	..	..	1	7	3
24	,, 20	66·6	52·4	59·1	70	0·26	197·2	29·900	81	41	24	17	..	3	..	..	..	..	1	3	4
25	,, 27	62·9	49·4	55·8	78	0·54	185·7	30·074	89	38	17	21	..	2	..	..	1	2	1	3	5
26	July 4	68·3	47·9	58·4	74	0·54	88·9	30·120	69	37	19	18	..	..	..	1	1	..	6	3	3
27	,, 11	73·4	50·5	62·1	65	0·51	158·9	30·129	87	11	22	19	..	1	..	..	..	..	10	6	4
28	,, 18	67·3	51·7	58·7	60	0·01	152·1	30·054	92	61	48	13	..	1	..	..	..	2	25	2	2
29	,, 25	75·7	55·7	65·6	67	0·12	99·9	30·171	89	95	65	30	..	5	..	..	5	..	35	3	8
30	Aug. 1	72·8	55·6	63·0	68	0·12	162·0	30·291	82	76	55	21	..	4	..	..	3	..	24	5	4
31	,, 8	66·7	50·8	57·2	78	1·41	117·7	29·941	74	83	59	24	..	6	..	..	..	..	26	6	3
32	,, 15	66·7	49·4	58·1	70	0·40	231·0	29·910	85	54	25	29	..	..	..	..	..	2	10	4	6
33	,, 22	65·0	49·9	56·9	81	0·65	127·0	30·014	88	58	36	22	..	..	..	..	3	2	9	..	5
34	,, 29	62·8	49·8	56·1	79	0·35	140·0	29·964	69	38	22	16	..	2	..	..	..	..	7	2	3
35	Sept. 5	63·5	48·7	56·4	76	0·67	150·1	29·821	82	57	29	28	..	3	..	1	1	2	6	8	5
36	,, 12	63·6	49·0	56·1	81	1·50	200·1	29·683	50	40	18	22	..	4	1	..	1	4	3	3	2
37	,, 19	67·9	50·4	58·4	83	0·69	197·7	29·920	75	46	16	30	..	5	..	..	..	2	5	3	5
38	,, 26	58·9	42·9	51·5	76	0·07	153·9	30·061	107	45	18	27	..	4	1	..	1	4	2	8	1
39	Oct. 3	56·5	40·9	49·6	79	0·46	213·3	29·761	84	50	17	33	..	3	..	..	..	1	2	8	3
40	,, 10	51·3	39·3	46·6	87	1·40	220·1	29·553	73	34	8	26	..	3	1	1	..	2	1	6	4
41	,, 17	52·0	39·2	45·5	88	0·95	165·3	29·886	73	27	15	12	..	2	..	..	1	1	..	2	3
42	,, 24	47·2	40·2	43·8	88	1·33	140·3	29·762	90	35	11	24	..	3	..	..	..	1	..	5	2
43	,, 31	48·9	37·0	43·1	86	1·70	199·9	29·499	95	44	14	30	..	1	..	1	..	..	..	11	2
44	Nov. 7	50·3	38·9	41·5	93	0·93	165·2	29·984	90	40	9	31	..	4	..	1	..	..	1	8	6
45	,, 14	41·0	39·7	42·2	91	0·17	102·4	30·161	93	34	16	18	..	3	..	1	..	1	..	5	1
46	,, 21	42·1	30·6	36·3	90	0·06	102·3	30·082	84	50	23	27	..	1	..	..	1	..	..	12	5
47	,, 28	47·4	39·9	44·3	92	1·31	186·3	29·400	76	39	21	18	..	4	..	..	1	..	..	7	2
48	Dec. 3	47·1	37·3	43·1	89	0·60	210·6	29·834	96	50	19	31	..	3	..	..	1	..	..	12	6
49	,, 12	36·7	25·9	31·0	85		157·5	30·159	107	43	22	21	..	2	..	..	1	..	1	12	4
50	,, 19	46·0	37·6	42·1	96	0·04	122·3	30·372	78	55	25	30	..	7	..	2	1	..	..	16	5
51	,, 26	43·2	34·3	39·3	89	0·02	101·1	30·329	76	37	15	22	..	4	..	1	..	..	..	9	4
52	Jan. 2	46·5	34·3	41·4	92	0·41	234·0	30·025	84	55	26	29	..	3	..	1	1	..	..	13	3

The above meteorological observations were taken at the Town Museum by Mr. J. C. Smith, to whom I am indebted for them.—H.T.

LOCALITIES IN WHICH DEATHS FROM ZYMOTIC DISEASE HAVE OCCURRED IN 1885, ARRANGED INTO WARDS AND STREETS.

DIARRHŒA.

WARD I.

	No. of Deaths.
Gallowtree-gate	1
High-street	2
Highcross-street	1

WARD II.

	No. of Deaths.
Abbey-street	2
Archdeacon-lane	1
Charlotte-street	1
Devonshire-street	1
Friday-street	1
Gravel-street	1
Garden-street	1
Leadenhall-street	1
Mansfield-street	3
New Parliament-street	1
Pasture-lane	2
Rayns-street	1
Spitalhouse-street	1
Sandacre-street	1
Sanvey-gate, court-D	1
Thames-street	1
Wood-street, court-B	1

WARD III.

	No. of Deaths.
Ash-street	2
Argyle-street	2
Benford-street	2
Bedford-street	3
Belgrave-road	2
Belgrave-gate	3
Bread-street	2
Brook-street	1
Braundon-street	1
Britannia-street court-B	1
Carley-street	1
Cranbourne-street	2
Chester-street	1
Christow-street	1
Denman-street	4
Dorset-street	1
Denmark-street	1
Elm-street	1
Framlin-cottages	1
Grosvenor-street	1
Gresham-street	1
Lee-street	1
Melton-street	1
Martin-street	2
Percy-street	1
Providence-place	2
Paradise-row	1
Paddock-street	1
Russell-street	1
Taylor-street	1
Wharf-street	3
Wheat-street	1
Willow-street	1
Wood-street	1
Woodboy-street	1

WARD IV.

	No. of Deaths.
Basil-street	1
Baker-street	1
Charnwood-street	2
Chandos-street	1
Charles-street, Upper	1
Conduit-street, ,,	1
Earl-street	1
Eaton-street	1
Elm-street	2
Frank-street	1
Goscote-street, East	1
Gartree-street	1
Gopsall-street	1
Harrington-street	1
Humberstone-gate	1
Humberstone-road	1
Marston-street	1
Newby-street	1
Occupation-road	1
Onslow-street	1
Rodney-street	2
Short-street, court-B	2
Stanley-street	1
Sherrard-street	2
St. Peter's-road	1
St. Saviour's-road	2
Sutherland-street	1
Skipworth-street	1
Union	2
Waring-street	1

WARD V.

	No. of Deaths.
New Walk	1
Regent-street	1

WARD VI.

	No. of Deaths.
Aylestone-street	1
Applegate-street	1
Albany-street	1
Andrew-street	1
Brown-street, Lower	2
Cardigan-street	1
Carlisle-street	1
Crystal-street	1
Castle-street	1
Crown-street	2
Cardinal-street	1
Deacon-street	1
Filbert-street	2
Fitzroy-street	1
Grange-lane	1
Gray-street	1
Hazel-street	2
Jewry Wall-street	1
Knighton-street	1
Leamington-street	1
Outram-street, court-B	1
Oxford-street, court-M	2
Pingle-street	1
Pike-yard	1
Poplar Avenue	1
St. Nicholas-square	1
Southgate-street, ct. A	1
West-street	1
West Holme-street	1
Walnut-street	2
York-street	1

WARD VII.

	No. of Deaths.
All Saints'-road	5
Bradgate-street	3
Blake-street	1
City Wall-street	1
Causeway-lane	1
Diamond-street	1
Emerald-street	1
Frog Island	3
Grundon-street	1
Harding-street	1
Henry-street	1
Harvey-lane	1
Jarrom-street	2
Littleton-street	1
Mill-street	1
Northgate-street, ct-D	1
St. Peter's-lane	1
St. Margaret's-street	1
Sanvey-gate, court-J	1
Soar-lane	1
Sycamore-lane	1
Ruding-street	1
Thornton-lane	2

TYPHOID FEVER.

WARD I.

Nil.

WARD II.

	No. of Deaths.
Abbey Park	1
Garden-street	1
Green-street, Lower	1
Osborne-street	1

WARD III.

	No. of Deaths.
Alfred-place	1
Argyle-street	2
Allington-street	1
Braundon-street	1
Belgrave-gate	1
Birstall-street	1
Crafton-street	1
Earl Howe-street	1
Gresham-street	2
Wharf-street	2

WARD IV.

	No. of Deaths.
Guthlaxton-street	1
Gopsall-cottages	1
Preston-street	1
Southampton-street	1
St. George's-street	1
Union	2

WARD V.

Nil.

WARD VI.

	No. of Deaths.
Andrew-street	1
Arundel-street	1
Castle-street	1
Dunn's-lane	1
Havelock-street	1
Hazel-street	1

WARD VII.

	No. of Deaths.
Abbey-gate	1
Bond-street	1
Blue Boar-lane	1
Durham-street	1
Friar-lane	1
North Bridge-place	1

SCARLET FEVER.

WARD I.

Church-gate	1
Hotel-street	1

WARD II.

Archdeacon-lane	1
Canning-place	1
Friday-street	1
Garfield-street	1
Garden-street	1
Gravel-street	1
Heanor-street	1
Leadenhall-street	1
Painter-street	1
Spencer-street	1
Spitalhouse-street	3
Wood-street	2

WARD III.

Birstall-street	2
Bedford-street, ct-C	1
Braundon-street	1
Britannia-street, ct-H	1
Birkley-street	1
Brunswick-street	3
Crab-street	1
Catherine-street	2
Curzon-street	1
Crafton-street	2
Curzon-terrace	1
Christow-street, ct. H	1
Eaton-street	1
Gresham-street	1
Grafton-street	1
Humberstone-road	1
Palmerstone-street	1
Rodney-street	1
Willow-street, Lower	1

WARD IV.

Colton-street	1
Conduit-street, Upper	1
Donnington-street	1
Evington-road	1
Evington-street	1
Edwin-street	1
Knighton-street	1
Melbourne-road	2
Newby-street	1
Peter's-lane	1
Richard-street	1
Southampton-street	1
Twycross-street	1

WARD V.

Albion-street	1
New Walk	1
Wellington-street	1

WARD VI.

Andrew-street	5
Brown-street, Lower	1
Buckingham-street	1
Braunstone-gate	1
Catesby-street	3
Clara-street	2
Chestnut-street	2
Dannet-street	1
Emerald-street	2
Foxon-street	4
Fitzroy-street	1
Grundon-street	1
Grange-lane	1
Hazel-street	1
Holme-street, Little	2
Holme-street, Great	2
Jewry Wall-street	1
Kate-street	2
Laxton-street	1
Mostyn-street	2
Norfolk-street	4
Noble-street	2
Poplar Avenue	1
Red Cross-street	1

WARD VII.

Abbey Park-road	1
Abbey-gate	1
Frog Island	1
Grape-street	1
Littleton-street	2
Milton-street	1
Millstone-lane	1
Northgates	1
Pingle-street	1
Sarah-street	1

MEASLES.

WARD I.

	No. of Deaths.
Gallowtree-gate	1

WARD II.

	No. of Deaths.
Archdeacon-lane	3
Burley's-lane	1
Birkley-street	1
Green-street	1
Navigation-street	1
Pasture-lane	1

WARD III.

	No. of Deaths.
Bedford-street	1
Benford-street	1
Crafton-street	1
Curzon-street	1
Cranbourne-street	1
Chester-street	1
Crab-street	1
Denmark-street	1
Erskine-street	1
Liggins-street, court A	1
Lewin-street, court A	1
Rodney-street	1
Royal East-street	1
Wheat-street	1
Wharf-street	1
Wanlip-street	1

WARD IV.

	No. of Deaths.
Crab-street	1
Guthlaxton-street	1
Union	1

WARD V.

Nil.

WARD VI.

	No. of Deaths.
Brown-street, Lower	1
Gray-street	1
Holme-street, Great	3
Kate-street	1
Norfolk-street	1
Oxford-street, court M	1

WARD VII.

	No. of Deaths.
Abbey-gate	1
All Saints'-road, ct-E	1
Bradgate-street	3
Blake-street	1
Emerald-street	1
Frog Island, court A	2
Henry-street	1
Harding-street	1
Jewry Wall-street	2
Old Mill-lane	1
Soar-lane	1
Vauxhall Gardens	1

WHOOPING COUGH.

WARD I.

Gallowtree-gate	1
Silver-street	1

WARD II.

Devonshire-street	1
Friday-street	1
14, Foundry-lane	1
Gravel-street	2
Mansfield-street	1
Orchard-street	1
Watling-street	1

WARD III.

Argyle-street	3
Belgrave-gate	4
Brunswick-street, Up.	2
Birstall-street	1
Bardolph-street	1
Britannia-street	1
Cranbourne-street	1
Chester-street	1
Catherine-street	1
Erskine-street	1
Junction-road	1
Palmerstone-street	1
Rodney-street	1
Wheat-street	2

WARD IV.

Avon-street	1
Baker-street	1
Colton-street, ct-H	1
Flint-street	1
Goscote-street, East	1
Gartree-street	1
Mount-street	1
Nelson-street	1
Occupation-road	1
Peel-street	1
Shenton-street	1

WARD V.

Albion-street	1

WARD VI.

Braunstone-gate	1
Carlisle-street	1
Gray-street	2
Holme-street, Great	1

WARD VII.

Alice-street	2
Emerald-street	1
Thornton-lane	1

DIPHTHERIA.

	No. of Deaths.
WARD I.	
Nil.	
WARD II.	
Sanvey-gate	1
WARD III.	
Chester-street ..	2
Willow-street ..	1

	No. of Deaths.
WARD IV.	
Avon-street	2
Gopsall-street ..	1
Humberstone-road ..	1
Peel-street	1
Severn-street ..	1
Vulcan-street Cottages	1
WARD V.	
Welford-road ..	1

	No. of Deaths.
WARD VI.	
Holme-street, Great	1
Knighton-street ..	1
WARD VII.	
Abbey-gate	1

Table of Registered Deaths in Leicester for the Year ending 31st December, 1885.

NOT CORRECTED FOR INSTITUTION DEATHS.

	Under 1.		1—		2—		3—		4—		Under 5.		5—		10—		15—		20—		25—		35—		45—		55—		65—		75—		85—		95—		Over 5.		All Ages.		Total
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
Class I. ZYMOTIC DISEASES.																																									
ORDER 1. MIASMATIC—																																									
1. Smallpox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
2. Measles	9	3	8	11	5	5	2	4	..	..	24	23	1	3	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	4	25	27	52
3. Scarlet Fever (Scarlatina)	4	2	10	4	9	6	4	8	2	3	29	23	4	9	2	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	7	10	36	33	69
4. Diphtheria	1	1	2	1	2	1	..	..	1	1	6	4	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	1	..	..	..	..	..	..	3	1	9	5	14
5. Quinsy	..	1	..	..	1	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	2	1	3
6. Croup	3	1	..	..	..	1	2	..	..	..	5	2	1	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	2	6	4	10
7. Whooping Cough	9	12	4	13	1	6	..	3	..	3	14	37	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	14	38	52
8. { Typhus Fever Enteric or Typhoid Fever Simple continued Fever	..	..	..	..	..	1	..	1	3	..	3	2	5	3	2	3	3	3	1	2	5	2	..	1	1	..	1	..	..	..	..	..	..	..	..	..	17	15	20	17	37
9. Erysipelas	..	1	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	1	1	1	..	..	..	..	3	3	3	4	7
10. Puerperal Fever (Metria)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	4	..	4	4
11. Carbuncle	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
12. Influenza	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
13. Dysentery	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	1	1
14. Diarrhœa	83	85	4	3	5	1	..	..	..	..	92	89	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	2	2	..	..	..	..	3	2	95	91	186
15. Cholera	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
16. Ague	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
17. Remittent Fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
18. Rheumatism	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	..	2	1	3	1	..	1	2	..	3	..	2	1	..	..	..	..	..	..	..	5	13	5	13	18
19. Other Zymotic Diseases	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	1	..	..	..	..	1	..	..	1	1	..	..	..	..	..	..	..	3	3	3	3	6
ORDER 2. ENTHETIC—																																									
1. Syphillis	7	1	..	..	..	..	..	..	..	..	7	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..	2	7	6	13
2. Stricture of Urethra	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
3. Hydrophobia	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
4. Glanders	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
ORDER 3. DIETIC—																																									
1. Privation	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
2. Want of Breast Milk	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
3. Purpura and Scurvy	..	..	..	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1
4. Alcoholism { *a* Del. Tremens	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..	1	1
{ *b* Intemperance	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
ORDER 4. PARASITIC—																																									
1. Thrush	1	1	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	2
2. Worms, &c.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

Class II.																																									
CONSTITUTIONAL DISEASES.																																									
ORDER 1. DIATHETIC—																																									
1. Gout	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
2. Dropsy	..	1	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	4	..	2	2	..	..	..	..	..	6	6	6	7	13
3. Cancer	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	2	3	..	10	1	13	5	12	8	5	2	1	..	..	..	..	19	44	19	44	63
4. Cancrum Oris (Noma)	..	..	..	..	..	..	..	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1
5. Mortification	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	2	..	2	2
ORDER 2. TUBERCULAR—																																									
1. Scrofula	1	..	1	..	..	..	..	..	..	..	2	..	1	..	1	..	..	..	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	3	2	5	2	7
2. Tabes Mesenterica	13	14	2	4	..	1	..	1	..	..	16	19	2	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	2	18	21	39
3. Phthisis	1	1	1	1	..	4	1	..	1	2	4	8	3	4	5	3	7	9	15	11	34	29	21	6	13	8	9	4	3	1	..	..	..	..	..	..	110	75	114	83	197
4. Hydrocephalus	7	1	3	2	3	1	..	..	..	1	13	5	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	14	6	20
Class III.																																									
LOCAL DISEASES.																																									
ORDER 1. NERVOUS SYSTEM—																																									
1. Cephalitis	6	6	1	3	..	1	..	..	2	..	9	10	1	2	..	2	3	..	..	1	..	..	..	1	2	..	1	..	..	..	..	..	..	..	..	..	7	6	16	16	32
2. Apoplexy	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	4	..	1	2	2	5	6	6	8	6	9	2	8	3	4	..	..	25	43	25	43	68
3. Paralysis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	4	3	3	6	1	5	2	7	2	..	5	3	..	..	..	24	18	24	18	42
4. Insanity	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	1
5. Chorea	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	1
6. Epilepsy	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	1	3	1	1	..	..	..	..	..	..	..	..	..	..	2	6	2	6	8
7. Convulsions	78	54	10	10	1	2	1	4	..	4	90	74	..	2	1	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	2	3	92	77	169
8. *Brain Disease, &c.*	11	5	3	4	1	2	2	6	1	..	18	17	6	..	..	..	..	2	1	2	1	2	..	3	4	1	2	4	2	2	..	..	..	..	..	..	16	16	34	33	67
ORDER 2. ORGANS OF CIRCULATION																																									
1. Pericarditis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	1
2. Aneurism	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	1	1	1	..	..	1	..	1	..	..	..	..	..	5	2	5	2	7
3. *Heart Disease, &c.*	..	1	..	..	..	..	..	..	1	..	1	1	5	1	2	4	2	1	..	1	2	8	9	8	8	14	16	16	10	15	7	3	..	..	..	..	70	71	71	72	143
ORDER 3. RESPIRATORY ORGANS—																																									
1. Laryngitis	..	2	2	..	..	..	1	1	..	1	3	4	..	2	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	1	3	4	7	11
2. Bronchitis	35	36	17	19	4	11	..	..	..	2	56	68	1	5	2	..	..	..	..	1	4	..	3	4	5	13	13	12	16	22	7	11	1	..	..	..	52	68	108	136	244
3. Pleurisy	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	1	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	3	2	3	2	5
4. Pneumonia	22	15	11	14	13	7	4	3	3	3	53	42	..	2	1	1	2	1	3	1	4	5	9	3	17	7	6	7	6	2	4	2	..	..	..	..	52	31	105	73	178
5. Asthma	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	3	..	..	1	..	..	..	..	3	2	3	2	5
6. *Lung Disease, &c.*	2	1	1	1	1	..	..	..	..	..	4	2	..	..	1	..	..	..	..	1	..	..	1	..	2	..	1	..	..	..	..	..	..	..	..	..	5	1	9	3	12
ORDER 4. DIGESTIVE ORGANS—																																									
1. Gastritis	2	..	..	1	..	..	..	..	..	..	2	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	1	..	..	1	..	..	..	..	..	3	1	5	2	7
2. Enteritis	2	4	..	1	..	..	..	..	..	..	2	5	..	..	..	..	..	..	..	..	1	1	1	..	..	..	1	..	1	..	..	..	..	..	..	..	4	1	6	6	12
3. Peritonitis	..	..	..	..	..	..	1	..	..	..	1	..	2	..	..	..	..	1	..	2	..	5	..	1	1	1	..	3	..	1	..	..	..	..	..	..	3	14	4	14	18

ROYAL COLLEGE OF SURGEONS OF ENGLAND
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